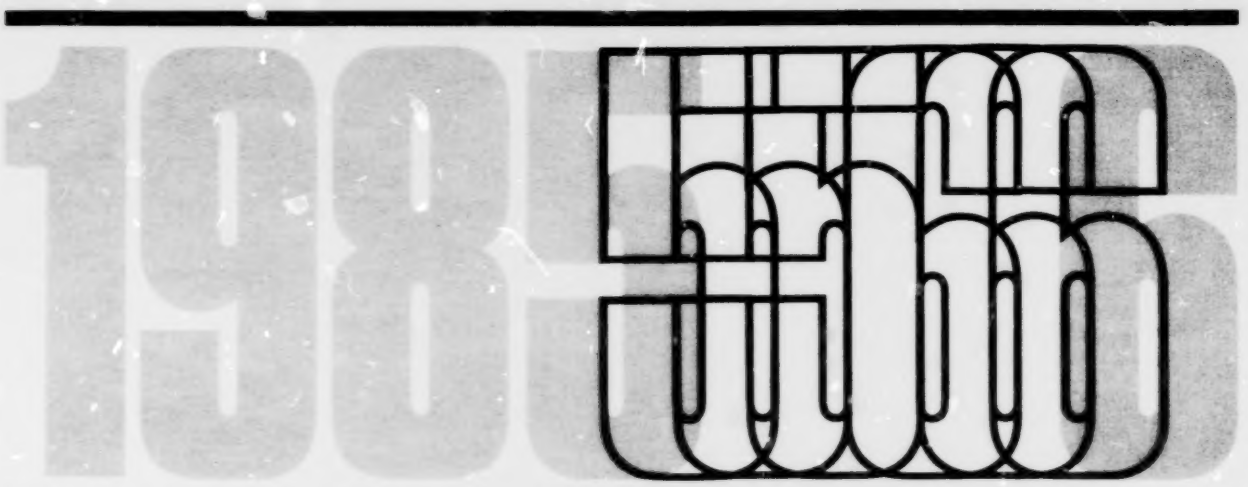


ANNUAL REPORT 1985/86

Alberta
TRANSPORTATION

ISSN 0702-7702

Alberta
TRANSPORTATION
AND UTILITIES

Office of the Minister
208 Legislature Building
Edmonton, Alberta
T5K 2B6
403/427-2080

The Honourable
W. Helen Hunley
Lieutenant-Governor
Province of Alberta

Madam:

I have the honour to submit to you the Annual Report of Alberta Transportation for the fiscal year ending March 31, 1986.

Allen "Boomer" Adair

ALLEN 'BOOMER' ADAIR
Minister of Transportation
and Utilities

Deputy Minister's Report

The fiscal year ending March 31, 1986 was again significant in the progress made in the development of Alberta's transportation systems.

Approximately $146 million was allocated to Alberta cities under the three year Urban Transportation Program with approximately $12 million provided under the five year Towns and Villages Streets Assistance Program. The Urban Program provided funding in four grant categories: Basic Capital; Major Continuous Corridors and Primary Highway Connectors; Public Transit Operating and Primary Highway Maintenance. The Streets Assistance Program provided funding for capital construction projects such as: Street grading, gravelling, base course, paving, concrete sidewalks, curbs and gutters, storm sewers and various other projects.

In the 1985/86 fiscal year $553 million was expended on the construction of provincial roadways. Due to an early spring start, this fiscal period resulted in the initiation of the largest number of construction projects recorded, although an early winter caused several projects to be carried over into 1986/87.

Highlights of the 1985/86 construction season were:

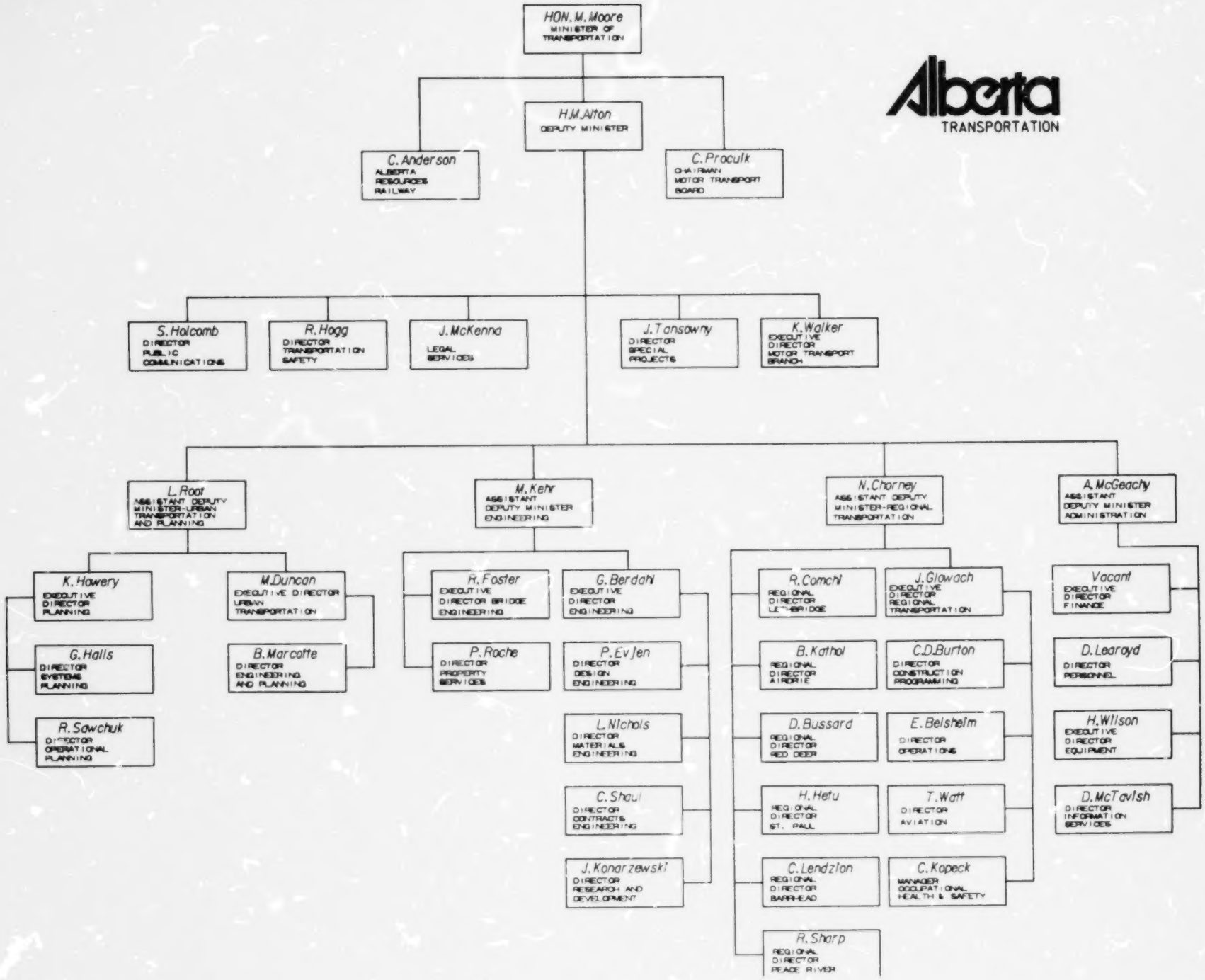
- The twinning of the Trans-Canada Highway (Highway 1) and the Yellowhead Highway (Highway 16) continued with high priority being placed on the sections with high traffic concerns.
- Work continued on Highway 40 with the highway being opened for traffic in the fall of 1986.
- Significant progress was made under the Pavement Rehabilitation Program in the restoration and strengthening of older highway pavement at a cost of over $46 million for 413 kilometres of paved highway restored.
- Secondary road network improvements continued to be a major priority with county, municipal district and improvement district councils and over $100 million was expended on 2536 kilometres of roadway under the Secondary Roads Program.

A number of airport facilities received assistance for various projects. Provincial and community airport construction and operation expenditures totalled $7.6 million during the year. The Wetaskiwin Air Terminal Building was completed and turned over to the City for operation and maintenance and major renovation and expansion of the High Level Air Terminal Building was planned, designed and prepared for tender.

Privatization, or the contracting out of services previously provided by departmental forces, continued to be given priority and included all areas previously affected as well as expanding to include some skid resistant treatment projects.

The challenges of downsizing expenditures and staff in 1985/86 were met with success by Alberta Transportation and its employees. The search for improved methods designed to streamline departmental operations and maintain efficient services has been successful and a strong organization has resulted. Alberta Transportation's ability to improve the safe and efficient movement of goods and people will continue to be the primary thrust in future years.

HARVEY M. ALTON
Deputy Minister


HON. M. Moore
MINISTER OF TRANSPORTATION
H.M. Alton
DEPUTY MINISTER
C. Anderson
ALBERTA RESOURCES RAILWAY
C. Proculk
CHAIRMAN MOTOR TRANSPORT BOARD
S. Holcomb
DIRECTOR PUBLIC COMMUNICATIONS
R. Hogg
DIRECTOR TRANSPORTATION SAFETY
J. McKenna
LEGAL SERVICES
J. Tansowny
DIRECTOR SPECIAL PROJECTS
K. Walker
EXECUTIVE DIRECTOR MOTOR TRANSPORT BRANCH
L. Root
ASSISTANT DEPUTY MINISTER-URBAN TRANSPORTATION AND PLANNING
M. Kehr
ASSISTANT DEPUTY MINISTER ENGINEERING
N. Chorney
ASSISTANT DEPUTY MINISTER-REGIONAL TRANSPORTATION
A. McGeachy
ASSISTANT DEPUTY MINISTER ADMINISTRATION
K. Howery
EXECUTIVE DIRECTOR PLANNING
G. Halls
DIRECTOR SYSTEMS PLANNING
R. Sawchuk
DIRECTOR OPERATIONAL PLANNING
M. Duncan
EXECUTIVE DIRECTOR URBAN TRANSPORTATION
B. Marcotte
DIRECTOR ENGINEERING AND PLANNING
R. Foster
EXECUTIVE DIRECTOR BRIDGE ENGINEERING
G. Berdahl
EXECUTIVE DIRECTOR ENGINEERING
P. Roche
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P. Evjen
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L. Nichols
DIRECTOR MATERIALS ENGINEERING
C. Shaul
DIRECTOR CONTRACTS ENGINEERING
J. Konarzewski
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R. Comchi
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J. Glowach
EXECUTIVE DIRECTOR REGIONAL TRANSPORTATION
B. Kathol
REGIONAL DIRECTOR AIRDRIE
C.D. Burton
DIRECTOR CONSTRUCTION PROGRAMMING
D. Bussard
REGIONAL DIRECTOR RED DEER
E. Belshelm
DIRECTOR OPERATIONS
H. Hetu
REGIONAL DIRECTOR ST. PAUL
T. Watt
DIRECTOR AVIATION
C. Lendzion
REGIONAL DIRECTOR BARRHEAD
C. Kopeck
MANAGER OCCUPATIONAL HEALTH & SAFETY
R. Sharp
REGIONAL DIRECTOR PEACE RIVER
Vacant
EXECUTIVE DIRECTOR FINANCE
D. Learoyd
DIRECTOR PERSONNEL
H. Wilson
EXECUTIVE DIRECTOR EQUIPMENT
D. McTavish
DIRECTOR INFORMATION SERVICES
Alberta
TRANSPORTATION

(1A)

Management Roles in Alberta Transportation

MANAGING DIRECTOR, ALBERTA RESOURCES RAILWAY - Responsible for revenues generated from railway usage. Makes annual assessment on required railway maintenance.

CHAIRMAN, MOTOR TRANSPORT BOARD - Responsible for managing the regulatory system governing intra and extra-provincial transportation within the framework of the Alberta and Federal Motor Transport Acts in the public interest.

DIRECTOR, TRANSPORTATION SAFETY BRANCH - Responsible for the development, administration and co-ordination of safety programs aimed at reducing the number of traffic collisions and fatalities in Alberta.

LEGAL SERVICES - Responsible for the provision of all required legal services to the department through seconded Attorney General's Department employees.

DIRECTOR, PUBLIC COMMUNICATIONS - Responsible for providing public relations counsel and communications services sustaining departmental policies, programs and activities.

DIRECTOR, SPECIAL PROJECTS - Responsible for carrying out assigned special projects and special investigations and providing reports as required.

EXECUTIVE DIRECTOR, MOTOR TRANSPORT BRANCH - Responsible for the regulation and control of the weights and dimensions of public vehicles. Provides administrative support to the Motor Transport Board.

ASSISTANT DEPUTY MINISTER, URBAN TRANSPORTATION AND PLANNING -Responsible for development and implementation of the Urban Transportation Program as well as the long-range systems planning and functional design of provincial highways.

EXECUTIVE DIRECTOR, PLANNING -Responsible for co-ordinating the systems planning, location studies, functional planning and roadside development throughout the province.

DIRECTOR, SYSTEMS PLANNING - Monitors the development plans of government agencies and the private sector, forecasts transportation demand, examines alternatives and recommends a multi-modal transportation system which best services the development objectives of the province.

DIRECTOR, OPERATIONAL PLANNING -Responsible for location studies and functional design for all new proposed highways in the province.

EXECUTIVE DIRECTOR, URBAN TRANSPORTATION - Develops policies to recognize the needs and opportunities of urban communities and administers the Urban Transportation Program.

DIRECTOR, ENGINEERING AND PLANNING - Recommends standards of construction for urban projects, implements and monitors grant allocations to urban areas.

ASSISTANT DEPUTY MINISTER, ENGINEERING - Responsible for the provision of engineering standards and specifications, design, contract policy and administration, land acquisition standards and conveyancing, applied research co-ordination, and technical support for Transportation's roadway, bridge, airport and ancillary programs.

EXECUTIVE DIRECTOR, BRIDGE ENGINEERING - Responsible for the standards, direction, and performance of the department s bridge engineering, and for planning and delivery of the major bridge construction and maintenance programs.

DIRECTOR, PROPERTY SERVICES - Responsible for monitoring and acceptance of right-of-way purchase agreements and payments, initiation of expropriation procedures, managing land inventory, co-ordinating municipal road closure legislated requirements, and providing legal survey services for departmental programs.

EXECUTIVE DIRECTOR, ENGINEERING -Responsible for providing co-ordinated engineering standards and services for all departmental programs in the areas of contracts, design, materials, and research and development.

DIRECTOR, DESIGN ENGINEERING -Responsible for the development, application and monitoring of geometric design standards and the provision of design engineering services supporting all primary highway, secondary road and airport construction programs.

DIRECTOR, MATERIALS ENGINEERING -Responsible for providing a wide range of engineering, technical and administrative materials-related policies, standards and services to all departmental construction and maintenance programs.

DIRECTOR, CONTRACTS ENGINEERING - Responsible for contract administration policy, contract tendering and final payment auditing, settlement of third party and contractors' construction claims, administration of field project reviews and contract related engineering support services.

DIRECTOR, RESEARCH AND DEVELOPMENT - Responsible for co-ordinating applied research relating to the construction, maintenance and safe operation of the provincial transportation system.

ASSISTANT DEPUTY MINISTER, REGIONAL TRANSPORTATION - Provides senior direction in all aspects of construction programming and operations; budget/program preparation, financial control, and information preparation. Responsible for operation and maintenance of provincial highway system, airports, campsites, ferries, and improvement district road networks. Provides input and direction for short and long range planning, and occupational health and safety.

REGIONAL DIRECTOR, LETHBRIDGE - Senior department representative in the region occupying the southernmost 150-250 kilometres of the province. Responsible for delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

REGIONAL DIRECTOR, AIRDRIE - Senior department representative in the region extending west to British Columbia and the national parks boundaries from Saskatchewan, and north and south between the Fifth and Ninth Baselines. Responsible for delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

REGIONAL DIRECTOR, RED DEER - Senior department representative in the region extending for 100-200 kilometres north and south across central Alberta. Responsible for delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

REGIONAL DIRECTOR, ST. PAUL - Senior department representative in the northeast quadrant of the province. Responsible for the delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

REGIONAL DIRECTOR, BARRHEAD - Senior department representative in the region west of Edmonton the national park boundary, and north to Swan Hills and Calling Lake. Responsible for delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

REGIONAL DIRECTOR, PEACE RIVER - Senior department representative in the area north and west of Lesser Slave Lake. Responsible for the delivery of all Transportation programs. The prime contact with the public, municipal governments, private industry, and other government agencies in the region.

EXECUTIVE DIRECTOR, REGIONAL TRANSPORTATION - Supervises and directs the head office divisional staff to ensure efficient management of all departmental programs implemented in the six provincial regions. Conducts and directs information preparation on important division and department issues and policies.

DIRECTOR, CONSTRUCTION PROGRAMMING BRANCH - Directs the development, scheduling, preparation, and management of the department's annual capital construction programs, municipal grants programs, and related support services. Overall department responsibility for budget and financial control co-ordination.

DIRECTOR, OPERATIONS - Responsible for establishing maintenance standards, and preparation and control of maintenance budget. Ensures equitable distribution of maintenance funds to the regions. Provides guidance to regional staff on operational problems, policy direction and interpretation. Responsible for provincial skid resistance program, traffic safety installations, seeding programs, and oversees operation of campgrounds, rest areas and ferries.

DIRECTOR, AVIATION - Responsible for overall management of the Alberta Airport Development Program and establishment of maintenance standards for provincial airport facilities. Maintains liaison with other levels of government respecting aviation matters and provides aviation expertise for information requirements within and outside of the department.

MANAGER, OCCUPATIONAL HEALTH AND SAFETY - Responsible for development and management of the department's programs for occupational health and safety, employee safe use of vehicles and equipment, and safety on the worksite, such as construction zone safety.

ASSISTANT DEPUTY MINISTER, ADMINISTRATION - Responsible for the provision of support services to the other divisions in the department.

EXECUTIVE DIRECTOR, FINANCE AND ADMINISTRATIVE SERVICES - Responsible for the design implementation and control of all financial systems and transactions.

EXECUTIVE DIRECTOR, EQUIPMENT, SUPPLY AND SERVICES - Responsible for the procurement repair and maintenance of all equipment and the purchase and inventory of all material in the revolving fund. Responsible for departmental accommodation, reproduction, communication and mail.

DIRECTOR, PERSONNEL MANAGEMENT - Responsible for the recruitment classification, payroll and training of all departmental staff.

DIRECTOR, INFORMATION SERVICES -Responsible for the design development, enhancement and operations of all computer based systems and the records management program for the department.

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ADMINISTRATION DIVISION

D.A. McGeachy
Assistant Deputy Minister

Equipment, Supply and Services Branch 3
H. Wilson
Executive Director

Finance and Administrative Services Branch 9
Vacant

Information Services 11
D.R. McTavish
Director

Personnel Management Branch 13
D.R. Learoyd
Director

Transportation Revolving Fund 4

The function of the *Administration Division* is to provide specialized services in support of the construction and maintenance activities of Alberta Transportation. In addition to offering technical and professional support, the division is the primary departmental contact with the central government agencies such as the Personnel Administration office, Treasury, Housing, and Public Works Supply and Services.

The Administration staff maintained or improved the level of service through increased utilization of technology resulting in substantial organizational change. This continuous change has resulted in a flexible dedicated staff whose achievements are highlighted in greater detail in the branch reports of Equipment Supply and Services, Information Services, Financial Services and Personnel Services.

Equipment, Supply and Services Branch

The Equipment, Supply and Services Branch administers the department's Transportation Revolving Fund. In this role the branch acts as a centralized service and supply agency addressing requirements of the department's program branches.

Audited financial statements for the Transportation Revolving Fund for the year ended March 31, 1986 are shown on pages 5-8.

Equipment Management

The Transportation Revolving Fund owns and operates a large fleet of mobile equipment employed by the program branches to discharge responsibilities in the construction and maintenance of roads, bridges, and airports within the provincial transportation system.

The major thrust in the equipment group during the year has been the establishment of a two tier equipment rental system, which clearly identifies the method of recovering capital and operating costs from equipment users through the rental program. Planned preventative maintenance programs are now being applied to the entire equipment fleet and has resulted in a marked reduction in in-service failures. The development of an Equipment Management System (EMS), which will allow maintenance and repair functions to be more adequately evaluated and controlled is proceeding according to plan.

Continued effort is being expended to ensure new equipment being procured is engineered to meet the environmental and operating conditions encountered in the province. Fleet size was continually monitored, ensuring utilization criteria was being met. Units no longer required in the fleet due to workload changes, or units having reached their economic life were disposed of, in the main through public auction.

Shop Operations

The branch operates a network of 29 repair, maintenance and service facilities which:

- service, repair, overhaul, and maintain the department's equipment fleet
- provide customer service to program branches and other government departments on a cost-recovery basis.

The two major facilities are located in Airdrie and Edmonton where operations include the manufacture of finished goods, fabrication of specialized requirements, and the overhaul and reconditioning of components for inventories.

Throughout the year 48 860 signs are manufactured, a decrease of eight per cent from the 1984/85 year. In accordance with the departmental policy of privatization, 28 350 (48 per cent) of these signs were manufactured by the private sector. Shop Operations is also responsible for the department's apprentice training program, which financed 130 apprentice programs again in 1985/86. The majority were in heavy-duty mechanic, welder, partsperson and machinist trades.

Stores Operations

Inventories maintained through the stores operation enable construction and maintenance functions to complete their program throughout the year. This unit, through its parts and material inventory, supports the fleet equipment repair and maintenance program and is instrumental in supplying materials for construction and maintenance purposes. Storage and maintenance of highway lighting equipment used by Transportation Safety Branch, airport runway lighting equipment used by Aviation Branch and several related safety items utilized throughout the Transportation Department are other responsibilities of the stores operation.

The inventory values have been maintained at the 1984/85 level of $17 million. Inventory line items have been reduced to 15 000 as opposed to 21 000 in 1984/85. This is due mainly to standardization of products as well as reporting and identification of commodity stocks.

Transportation Revolving Fund

Auditor's Report

To the Minister of Transportation and Utilities

I have examined the balance sheet of the Transportation Revolving Fund as at March 31, 1986 and the statements of operations and surplus and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Fund as at March 31, 1986 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Donald D. Salmon

C.A.
Auditor General

Edmonton, Alberta
July 4, 1986

STATEMENT A

BALANCE SHEET

As At March 31, 1986

	1986	1985
ASSETS		
Current:		
Accounts receivable	$ 17 023 740	$ 14 337 487
Material inventories (Note 3)	16 654 917	13 671 490
Gravel inventory	27 770 485	8 846 832
Land inventory	5 556 628	3 459 245
	67 005 770	40 315 054
Fixed:		
Rental equipment, at cost	84 948 589	80 783 024
Accumulated depreciation	51 961 570	48 312 073
	32 987 019	32 470 951
	$ 99 992 789	$ 72 786 005
LIABILITIES AND SURPLUS		
Current:		
Accounts payable and accrued liabilities	$ 18 265 876	$ 8 283 869
Provincial Treasurer's advance	80 464 747	56 609 325
Surplus	1 262 166	7 892 811
	$ 99 992 789	$ 72 786 005

The accompanying notes are part of these financial statements

STATEMENT B

STATEMENT OF OPERATIONS AND SURPLUS

For the Year Ended March 31, 1986

	1986	1985
OPERATING INCOME (LOSS)		
Income (loss) on equipment rental operations (Schedule 1)	$ (5 488 521)	$ 2 002 379
Gain on disposal of equipment	512 978	444 111
Recoveries on sale of inventories (Schedule 2)	1 979 879	2 185 356
Shop labour revenue	805 957	897 770
	(2 189 707)	5 529 616
GENERAL AND ADMINISTRATION EXPENSES		
General expenses	1 538 355	2 102 721
Administration (Note 4)	1 332 754	1 059 448
Unapplied labour expenses	1 211 203	1 528 697
Unapplied inventory expenses	358 626	360 765
	4 440 938	5 051 631
Net income (Loss) for the year	(6 630 645)	477 985
Surplus at beginning of year	7 892 811	7 414 826
Surplus at end of year	$ 1 262 166	$ 7 892 811

STATEMENT C

STATEMENT OF CHANGES IN FINANCIAL POSITION

For the Year Ended March 31, 1986

	1986	1985
OPERATING ACTIVITIES		
Cash from operations		
Net income (loss) for the year	$ (6 630 645)	$ 477 985
Net charges to income which do not reduce cash		
Depreciation	8 057 194	8 380 582
Gain on disposal of equipment - net	(512 978)	(444 111)
	913 571	8 414 456
Changes in non-cash working capital		
(Increase) decrease in accounts receivable	(2 686 253)	9 468 591
(Increase) decrease in materials inventory	(2 983 427)	662 116
Increase in accounts payable	9 982 007	5 020 457
	$ 5 225 898	$ 23 565 620
INVESTMENT ACTIVITIES		
Proceeds from gravel disposals	12 644 082	4 557 543
Proceeds from equipment disposals	734 093	1 014 159
Proceeds from land disposals	4 032 762	3 444 466
Additions to gravel inventory	(31 567 735)	(12 364 691)
Additions to equipment	(8 794 377)	(4 221 973)
Purchases of land	(6 130 145)	(2 760 828)
	(29 081 320)	(10 331 324)
(INCREASE) DECREASE IN PROVINCIAL TREASURER'S ADVANCE	$ (23 855 422)	$ (13 234 296)

SCHEDULE 1

SCHEDULE OF INCOME (LOSS) ON EQUIPMENT RENTAL OPERATIONS

For the Year Ended March 31, 1986

	1986	1985
RENTAL REVENUE	$ 27 591 034	$ 32 782 317
EQUIPMENT MAINTENANCE AND OPERATING EXPENSES		
Labour	8 603 374	7 865 757
Parts	7 531 039	7 243 581
Diesel fuel	3 222 447	2 894 732
Gasoline	3 195 277	2 620 994
Blades	—	2 242
Tires	1 120 713	1 065 972
Lubrication	676 419	624 235
Miscellaneous	673 092	898 827
	25 022 361	23 216 340
Less: Internal equipment rentals	—	816 984
	25 022 361	22 399 356
Depreciation	8 057 194	8 380 582
	33 079 555	30 779 938
INCOME (LOSS) ON EQUIPMENT RENTAL OPERATIONS	$ (5 488 521)	$ 2 002 379

SCHEDULE 2

SCHEDULE OF RECOVERIES ON SALE OF INVENTORIES

For the Year Ended March 31, 1986

	1986			1985
	Sales	**Cost of Sales**	**Net**	**Net**
Parts and supplies	**$ 20 948 493**	**$ 18 991 243**	**$ 1 957 250**	$ 2 162 484
Lumber	**729 172**	**706 543**	**22 629**	22 872
	$ 21 677 665	**$ 19 697 786**	**$ 1 979 879**	$ 2 185 356

NOTES TO THE FINANCIAL STATEMENTS

March 31, 1986

NOTE 1 AUTHORITY

The Transportation Revolving Fund operates under the authority of the Department of Transportation Act, Chapter D-30, Revised Statutes of Alberta 1980.

NOTE 2 SIGNIFICANT ACCOUNTING POLICIES

(a) BASIS OF ACCOUNTING

The Transportation Revolving Fund records revenue and expenditures on the accrual basis.

(b) INVENTORY

The Transportation Revolving Fund is used to finance the acquisition of gravel and land to be used by the Department of Transportation. All expenditures made by the Fund for gravel and land are held in inventory and recoverable from the department.

Gravel inventory is valued at cost less billings to the department.

Land inventory is valued at cost less recoveries from third party rentals.

Other inventories are valued at the lower of cost and net realizable value. Portions of lumber and petroleum product inventories are held by third parties.

(c) DEPRECIATION

Equipment is depreciated on a straight-line basis with the exception of three/quarter ton trucks which are depreciated on the basis of kilometres used. The approximate useful life of major equipment categories is as follows:

Light trucks	4 or 5 years
Heavy trucks	7 or 10 years
Graders, tractors, loaders, trailers, asphalt plants and cranes	10 or 15 years

NOTE 3 MATERIAL INVENTORIES

Material inventories are summarized as follows:

	1986	1985
Parts and supplies	$ 13 507 267	$ 10 612 951
Lumber	1 980 738	2 533 162
Petroleum products	416 008	370 960
Work in progress	750 904	154 417
	$ 16 654 917	$ 13 671 490

NOTE 4 ADMINISTRATION EXPENSES

Repair shops, warehouse facilities, head office accommodations, basic office equipment and furnishings and certain salaries and wages are provided by the Province of Alberta at no cost to the Fund, and accordingly are not reflected in these financial statements.

NOTE 5 STATUTORY APPROPRIATION

In the Public Accounts of Alberta, the net expenditures of the Revolving Fund are included in the Department of Transportation's expenditure statements. Because the General Revenue Fund records fixed asset acquisitions as expenditures and does not recognize inventories, the following adjustments are required to arrive at the net expenditures reported as the statutory appropriation in the Public Accounts:

Net loss for the year	$ 6 630 645
Add:	
Net equipment acquisitions	8 573 262
Increase in inventories:	
Materials	2 983 427
Land	2 097 383
Gravel	18 923 653
	39 208 370
Less: Depreciation	8 057 194
Statutory appropriation for the year	$ 31 151 176

NOTE 6 COMPARATIVE FIGURES

The 1985 figures have been reclassified where necessary to conform to 1986 presentation.

NOTE 7 APPROVAL OF FINANCIAL STATEMENT

These financial statements were approved by management.

Finance and Administrative Services Branch

The Finance and Administrative Services Branch prescribes and implements financial and reporting control systems and financial policies and procedures directed at ensuring departmental consistency and compliance with the Financial Administration Act and related Treasury Board directives.

The branch manages departmental accounting systems, financial planning activities, supervises facility services and accommodations, and provides records management and related administrative services.

Highlights

In the area of Financial Systems and Methods, the first module of the Financial Reporting and Control System (FRACS) was in service for the entire year. Development work continued on the second module, the first phase of which is expected to be implemented in late fiscal 1986/87. The remaining two phases are expected to go into service in fiscal 1987/88. A team consisting of three managers from within the branch has been dedicated to deal with the implementation of the new system that will replace the Alberta Financial Information System (AFIS) in the department on April 1, 1988. FRACS and the AFIS replacement system, called Central Financial System/ Departmental Financial System (CFS/DFS), are designed to work together to provide the financial information required by the department.

In spite of staff reductions, the Accounting Operations Section processed 248 000 payments (an increase of 23 per cent over the previous year) while reducing the average processing time to 32 days from 35 days. These improvements were achieved through improved financial and administrative practices and a commitment by the staff to provide a high level of service.

The Financial Planning and Control Section co-ordinated the development of the department operating, capital and Heritage Trust Fund budgets, provided financial planning information to the department, monitored expenditures to ensure that they were within legislative and departmental controls and processed 864 insurance claims through Risk Management and Insurance Division of Alberta Treasury.

Administrative Services Section provides general support services for Alberta Transportation. The section is responsible for records management, mail service, blueprint and repographics, facilities planning, central stores, tool crib and telecommunications. Through the provision of these general services the department ensures a level of service necessary to support the various programs within the guidelines established by the government.

BUDGETARY EXPENDITURE CLASSIFIED BY OBJECT

	In Thousand $ for the Year Ended	
	March 31, 1986	March 31, 1985
MANPOWER		
Salaries (permanent positions)	$ 39 472	$ 37 699
Salaries (non-permanent positions)	4 622	4 856
Wages	75 611	69 830
Payments to contract employees	124	95
Employer contributions	9 324	8 584
Allowances and benefits	634	385
Total Manpower	$ 129 787	$ 121 449
SUPPLIES AND SERVICES		
Travel expenses	7 208	6 772
Advertising	1 047	875
Insurance	162	152
Freight and postage	539	510
Contracts for construction	239 598	190 436
Rentals	97 541	125 069
Telephone and communications	2 679	2 437
Repairs and maintenance	2 682	2 738
Contract services	12 066	11 002
Data processing services	3 414	3 343
Hospitality	37	26
Other purchased services	5 885	5 958
Materials and supplies	166 321	119 315
Total Supplies and Services	$ 539 179	$ 468 633
GRANTS		
Grants to individuals	—	—
Grants to business	—	—
Grants to non-profit organizations	141	320
Grants to own funds and agencies	9 645	9 645
Grants to other government levels	190 535	189 770
Total Grants	$ 200 321	$ 199 735
FIXED ASSETS		
Purchase of real estate	5 720	7 906
Purchase of machinery/ equipment	3 152	1 499
Purchase of data processing equipment	1 659	439
Purchase of audiovisual equipment	32	95
Purchase of reproduction equipment	—	5
Purchase of office equipment	109	106
Purchase of furniture	45	15
Purchase of vehicles	1	—
Purchase of other assets	75	18
Total Fixed Assets	$ 10 793	$ 10 083
OTHER		
Payments to members of the Legislative Assembly and Executive Council	41	40
Pension payments	—	(3)
Total other	41	37
TOTAL DEPARTMENT	$ 880 121	$ 799 937

BUDGET ESTIMATES, TRANSFERS AND EXPENDITURES CLASSIFIED BY VOTE

General Revenue Fund

In Thousand $

		1985/86 Budget Estimates	1985/86 Transfers	1985/86 Total Authorized	Expenditures For the Year Ended 31 March '86	31 March '85
Vote 1	DEPARTMENTAL SUPPORT SERVICES					
	Executive Services	$ 1 485	$ 39	$ 1 524	$ 1 370	$ 1 220
	Administrative Services	14 564	191	14 755	14 062	12 859
		16 049	230	16 279	15 432	14 079
Vote 2	CONSTRUCTION AND MAINTENANCE OF HIGHWAYS					
	Program Support	36 254	(302)	35 952	35 954	33 719
	Improvement of primary highway systems	256 116	774	256 890	257 992	209 410
	Improvement of rural/local highways	146 348	12 915	159 263	159 107	156 510
	Financial assistance for rural/local highways	39 739	4 129	43 868	43 860	37 116
	Maintenance of primary highway systems	70 487	(228)	70 259	70 054	68 615
	Maintenance of rural/local highways	18 914	(546)	18 368	18 358	17 980
	Apprenticeship training	3 232	(458)	2 774	2 772	2 755
	Rural resource roads	46 000	52	46 052	46 035	37 682
	Pavement rehabilitation	55 968	(9 629)	46 339	46 326	32 437
		673 058	6 707	679 765	680 458	596 224
Vote 3	CONSTRUCTION AND OPERATION OF RAIL SYSTEMS	9 645	—	9 645	9 645	9 645
Vote 4	CONSTRUCTION AND MAINTENANCE OF AIRPORT FACILITIES					
	Construction of airports	7 000	690	7 690	7 617	8 623
	Maintenance of airports	2 423	(62)	2 361	2 385	2 159
		9 423	628	10 051	10 002	10 782
Vote 5	SPECIALIZED TRANSPORTATION SERVICES					
	Transportation Planning and Research	6 206	147	6 353	5 888	6 144
	Highway system user services	9 439	212	9 651	9 242	9 942
		15 645	359	16 004	15 130	16 086
Vote 6	URBAN TRANSPORTATION FINANCIAL ASSISTANCE					
	Program Support	750	18	768	542	662
	Financial assistance (Capital)	137 000	(46)	136 954	127 251	133 575
	Financial assistance (Operating)	21 650	46	21 696	21 662	18 884
		159 400	18	159 418	149 455	153 121
		$ 883 220	$ 7 942	$ 891 162	$ 880 122	$ 799 937

REVENUE CLASSIFIED BY SOURCE

	1986	1985
Payments from Government of Canada		
Railway grade crossings	$ —	$ (1 270)
Other	252 778	232 070
	252 778	230 800
Fees, Permits & Licenses		
Motor Transport Branch	6 342 812	5 553 035
Airport revenue	242 704	168 252
Other	46 584	68 157
	6 632 100	5 789 444
Other Revenue		
Refunds of expenditures		
Previous year's refunds	1 102 528	1 725 190
Other	286 401	183 834
Sales of assets		
Land	69 142	4 932
Other	7 840	13 281
Miscellaneous		
Rentals	586 626	590 489
Other	457 015	271 900
	2 509 552	2 789 626
Total Revenue	$ 9 394 430	$ 8 809 870

Information Services Branch

Information Services Branch develops, maintains and supports computer based systems for the department. In addition the branch is responsible for the provision of word processing and records management services. The branch consists of the following sections.

Systems Planning

Systems Planning is responsible for the development of long and short range departmental data processing plans and for the operations of the data communications network and the departmental interactive graphics system. The section also provides word processing, data entry and remote job entry services.

Engineering Systems

Engineering Systems is responsible for the design, development and maintenance of computer based systems used by technical and engineering staff in the department.

Administrative Systems

Administrative Systems is responsible for the design, development and maintenance of computer based systems to support administrative functions within the department.

Records Management

Records Management is responsible for the development of policies and procedures to manage the storage, access and disposal of records created in the department.

During the reporting period the branch worked on 110 projects and provided 35 000 hours of systems development effort. A further 16 000 hours was allocated to user support, training and education. Several of the more significant undertakings are described below.

Strategic Information Systems Plan

Work on this project continued through the year and has resulted in the development of a model that describes the functions of the department and the processes that support each function. In addition the model also describes the data that is used by each of the processes.

Computer Resources Utilization System

This system was refined and now provides information on a monthly basis of the levels of expenditure throughout the department for the use of Alberta Public Works Supply & Services' (APWSS) data processing resources.

Microcomputers

The department continued to install microcomputers to assist technical and administrative staff operations. At the end of the reporting period the department had approximately 75 systems installed.

Regional Network

Additional equipment was installed to provide the Motor Transport Branch/Board with access to the Operating Authority System which is integrated with Alberta Solicitor General's network.

Transportation Interactive Graphics System (Phase II)

The second phase of the Interactive Graphics System was installed and this system now consists of 23 workstations and two plotters to assist technical and engineering users in the creation of maps and plans associated with the design and construction of highways and bridges.

Culvert Design System

Work was begun on this system which will eventually provide subsystems for Stage Discharge, Hydraulics, Geometric Design and Structural Design. The Stage Discharge and Hydraulics portions have been implemented and the remaining two functions will be implemented in the 1986 fiscal year.

Electronic Fieldbooks

Additional Electronic Fieldbooks were acquired and are now being used more extensively by field staff to collect land survey and Benklemon Beam data. These hand-held electronic data collection devices allow data to be transferred directly to the APWSS computers and reduce the need for manual coding and data entry.

Plot Preview Pilot

A pilot project was established to install and test equipment to provide region and district offices with a facility to view plots generated by the APWSS computers in order to reduce the amount of time to generate paper plots and to mail them to the field offices.

Equipment Management and Regional Transportation Financial System

The first module of this system was successfully implemented and now provides a much improved method of calculating and making payments for rental of equipment maintained by the Equipment, Supply and Services Branch and used by the region and district staff of the department. Design of the second module is underway to provide additional equipment management functions and to considerably enhance the financial reporting and control activities of the department generally.

Accident Analysis System

This system was rewritten in order to provide additional facilities for the analysis of vehicular accidents on the transportation system.

School Bus Inspection System

This system was enhanced to provide a facility to monitor service stations and mechanics who are licensed to perform inspections on written off vehicles.

Precast Units Inventory System

This system, which is used by the Bridge Engineering Branch, maintains production and accounting information associated with the purchase of standard precast concrete bridge units. The system allows the branch to monitor ordering, quality control, payments and shipping of the material.

Word Processing

The existing system was enhanced by the addition of equipment in the offices of the Motor Transport Board/Branch in Red Deer. Plans are in place to provide a communications link between Red Deer and Edmonton to enable the transfer of documents.

Records Management

Records Management Services operated an automated file retrieval system for approximately 15 000 cubic feet of semi-active records and also assisted a number of branches in the conversion of their filing systems to a departmental standard. Work continues on the conversion of other areas of the department.

Personnel Management Branch

The Personnel Management Branch has enjoyed a productive year in the face of many challenges in the field of human resource management. Credit is due both to the Personnel Branch staff and to the line managers who have managed through joint efforts to deliver large, complex construction and maintenance programs with fewer resources.

The department continued to experience new challenges associated with low turnover of staff, lack of mobility in the work force and the requirement for increasing productivity to offset a decline in the work force.

These factors and others have tended to create a stressful environment for our staff. The pressures in turn result in increasing difficulties in managing our human resources and in maintaining a high level of productivity.

Employee Relations and Payroll

There has been a continuing rise in employee relations activities with many more informal complaints and formalized grievances than we have experienced in the past. These symptoms of stress have been viewed with concern and efforts of the Personnel Branch staff and line managers have been turned to improving environmental working conditions and in providing solutions to the identified problems.

Payroll remained operationally active and increasingly complex as more responsibilities were delegated from the central agencies to the department level. While processes to automate the payroll system are not yet complete, preliminary steps in this direction have been taken. To provide insight into the level of production of the Payroll and Benefit Section, the following statistics are provided.

Percentage of Employees on Direct Deposit	26%
Average number of Wage Employees	2176
Permanent Employees	2940
Project Employees	546

The department continues to experience an increasing workload in the administration of the Long Term Disability Program. Statistics for the program are as follows:

Total number of claimants	77
Number of employees on rehabilitation assignments	8

Organization Development

The extensive training and development program that has been planned and executed by our Organization and Development Section has been received enthusiastically by departmental staff. In addition to the solid foundation of training courses so necessary in our highly technical operations, we have been able to participate in a number of innovative programs which are of corporate importance. An example of this innovative type of approach is found in the following activities:

- participation in the development of the Departmental Strategic Information Plan where the branch planning exercises were facilitated to a large extent by the Personnel Branch staff
- direct involvement in the initial developmental phases of the Corporate Strategic Plan.

The following summary is indicative of the extensive training and development program that has been successfully implemented during the period under review.

	No of Participants
Alberta Transportation (In house courses)	2755
Operations Training Program	1750
Personnel Administration Office (OD Division Courses)	460
Outside Courses (University/private)	600
Public Works Supply and Services (Computers/Records Management)	340
Attendance Total	5905

General Personnel Services

While staffing activity has lessened, the complexity of internal processes has increased due to a dramatic increase in the number of applications on competitions. Other programs such as the Summer Temporary Employment Program (STEP), the Priority Employment Program (PEP), the Apprenticeship Program, the Employment Skills Program and the Engineering Cooperative Program (University of Alberta) have all resulted in increased numbers of applications for fewer positions. As a result, workloads in the area have increased although actual appointments may have diminished over previous years. Statistics for these programs are as follows.

	No of Participants
Summer Temporary Employment Program (STEP)	105
Priority Employment Program (PEP)	40
Apprenticeship Program	98
Employment Skills Program (ESP)	41
Civil Engineering Co-op Program	17
Other Major Recruitment Programs	
Number of Regular Competitive Staffing Actions	150
Number that were without competition	164
Number of positions deleted (Code 1)	59
Classification Actions	
Number of Non-Management Classification Actions	534
Number of Management Classifications Submitted	42

The continuing dedicated efforts of the Personnel Branch staff working in harmony with departmental managers and staff, will assist the department to meet the difficult challenges of the future.

ENGINEERING DIVISION

M.A. Kehr
Assistant Deputy Minister
G.A. Berdahl
Executive Director

Bridge Engineering Branch 17

R.L. Foster
Executive Director

Contracts Engineering Branch 19

C.E. Shaul
Director

Design Engineering Branch 22

P.M. Evjen
Director

Materials Engineering Branch 24

L.W. Nichols
Director

Property Services Branch 26

P. Roche
Director

Research and Development Branch 27

J. Konarzewski
Director

The *Engineering Division* comprises six branches each representing a functional support service to the construction and maintenance programs of the department. The branches are: Bridge Engineering, Contracts Engineering, Design Engineering, Materials Engineering, Property Services, and Research and Development Branches. Responsibilities of the division include:

- engineering standards and specifications
- roadway geometric and structural design
- bridge structural design and construction of major bridges
- construction contract tendering and administration
- construction materials procurement and testing standards
- standards of right-of-way and land acquisition, survey and conveyancing
- development and co-ordination of applied research for departmental construction and maintenance programs
- technical support for all programs.

A continued high level of funding for the department's capital construction program again produced active bidding and competitive pricing by the construction industry. Despite this bidding market pressure and adequate industry work volume capacity, the composite cost index for the department's tendered construction work increased by 10 percentage points over the preceding year, following the trend established in 1984/85 for the industry's recovery to more stable pricing levels.

Demands of a continued large capital program on the services of the division were accommodated without major difficulty. Impacts of the third successive two per cent annual reduction in permanent staff numbers were offset through efficiencies coming on stream in increased computer system usage, and through continued employment of private consultants to accommodate a portion of roadway and bridge design engineering workloads.

The Bridge Engineering Branch again provided for Alberta Environment the bridge engineering and construction support component to the Heritage Savings Trust funded Irrigation Headworks and Main Irrigation Systems Program.

Individual reports of each of the branches follow.

Bridge Engineering Branch

Bridge Engineering Branch provides bridge design, bridge construction, structural engineering and river engineering for departmental programs. Its services consist of preliminary engineering, detailed design, material acquisition, contract preparation, construction and liaison with regional bridge staff on all bridge-related matters. These functions of the branch are accomplished within five organizational sections: Bridge Planning, Bridge Design, Bridge Materials, Bridge Construction, and Bridge Services.

Services were supplied in four major program areas: primary highway bridge construction, secondary and local road bridge construction, primary highway bridge maintenance and secondary and local road bridge maintenance.

Bridge structures were designed and built to accommodate expansion and upgrading of the province's primary highway system. These structures varied from 1500 millimetre diameter culverts to crossings of major rivers, such as the North Saskatchewan River on Highway 41 south of Elk Point. Highway grade separations accounted for a significant part of the budget expenditure.

Design, construction and major reconstruction of bridges on local and secondary roads, also varying from culverts to major bridges, were provided.

Maintenance activities were provided for primary highway, secondary and local road bridges. Bridges were inspected, maintenance work planned and appropriate work performed. Developmental work was continued in the search for ways of restoring and protecting bridges being attacked by de-icing salt. Improved deck sealing systems were introduced in new construction. Concrete reinforced with steel fibres was tested and used as a tough deck overlay material. Fibre-reinforced concrete applied as shotcrete was also tested and applied successfully in the restoration of large corrugated steel culverts failing under load.

In addition to the major work performed in these areas under direct responsibility of the Bridge Engineering Branch, engineering services were provided for programs administered by other branches and departments. The branch was again assigned responsibility for new bridge structures required for the Alberta Environment program of rehabilitation of the main irrigation canal systems in southern Alberta, funded by the Alberta Heritage Savings Trust Fund. During the reporting year 29 bridges were built under this program. Branch staff also provided bridge engineering input into the administration of the department's Urban Transportation Program.

Major Bridge Construction Projects

TRANS-CANADA HIGHWAY TWINNING PROJECT, east of Bassano: Construction of the EID Canal, Springhill Canal, and the two subway structures commenced in conjunction with the highway twinning from Bassano to east of Southesk. These bridges are part of the program to upgrade Highway 1 to a modern multilane standard to increase safety for the high volumes of traffic using this highway.

CROWFOOT CREEK, east of Cluny: Twinning of the Trans-Canada Highway also included a new bridge to carry eastbound traffic across Crowfoot Creek. The existing bridge will remain in service to carry westbound traffic.

SHEEP RIVER, near Aldersyde south of Calgary: Construction was begun on a major new bridge to accommodate two lanes of northbound traffic in conjunction with the twinning of Highway 2. The divided multilaned facility will improve the safety and service for the high volumes of traffic using this highway.

GRADE SEPARATION AND CNR OVERPASS near Morinville: Construction commenced on the multilaning of Highway 2 near Morinville which included twinning of the existing SR 642 Interchange and CNR Overpass structures. The four-lane facility will improve safety for the heavy traffic from St. Albert to Morinville.

JAMES RIVER, north of Sundre: Construction of a new bridge commenced in conjunction with the construction of Highway 22X near Sundre. The new open deck bridge will accommodate heavy industrial loads, previously required to use alternative routes. This new highway link will provide a more direct route between Highway 54 and 27.

HIGHWAY 40 PROJECTS, north of Grande Cache: Construction on the Sheep Creek, Mine Haul and Conveyor Belt bridges commenced in conjunction with construction of Highway 40 north of Grande Cache. The Mine Haul and Conveyor Belt structures are necessary to provide Smoky River Coal Company industrial access between plant and mining operations. These projects are links in the Highway 40 connection between Grande Prairie and Grande Cache.

OLDMAN RIVER, northwest of Coalhurst: Construction was begun on a major new bridge in conjunction with new SR 509 route construction between Stand Off and Highway 3. The new route will improve the access to the Blood Indian Reserve.

KNEEHILL CREEK, east of Acme: Construction of this bridge commenced in conjunction with upgrading of SR 575 between Highway 21 and Acme on an improved road alignment through the valley. The new bridge will replace a substandard steel truss and will accommodate modern heavy loads and wide farm machinery.

BELLY RIVER, south of Hill Spring: Construction of a new bridge was begun to replace a substandard single lane steel truss carrying SR 800 over the Belly River. The new bridge will improve safety and allow heavy loads and wide farm machinery to use this crossing.

CHRISTINA RIVER, north of Chard: Construction of SR 881 between Conklin and Chard included a new bridge across Christina River. The bridge and road will provide all weather access between Conklin and Fort McMurray for the first time.

CROWSNEST RIVER between Hillcrest and Bellevue in the Municipality of Crowsnest Pass: Construction of a bridge was begun to replace a substandard single lane steel truss carrying a main local road over Crowsnest River. The new bridge will improve safety and allow heavy log and other industrial loads to use this crossing.

OTHER BRIDGE CONSTRUCTION PROJECTS

On Primary Highways

	HWY NO.	PROJECT	BRIDGE TYPE
River Bridges			
	1	Hartell Coulee, Strathmore	Repair SPCSP *
•	2	Belly River Canal, Stand Off	Concrete girders
	2	Waskasoo Creek, Red Deer	2 Composite concrete/ SPCSP *** culverts
	9	Crossfield Creek, Irricana	Composite concrete/ SPCSP *** culvert
	11	Horseguard Creek, Alhambra	Concrete girders
•	16	Maskuta Creek, Hinton	Concrete girders
••	16	Pembina River, Evansburg	Paint trusses
•	22	Stimson Creek, Longview	Concrete girders
•	22	Pekisko Creek, Longview	Concrete girders
	34	Kleskun Hills Drain, Grande Prairie	Concrete girders
	35	Whitemud River, Dixonville	Strengthen
	35	Kemp Creek, Hotchkiss	Strengthen
•	36	Amisk River, Kikino	Reconstruct end spans
••	36	SMRID Canal Site 44A, Taber	Concrete girders
•	40	Cutbank River, Grande Prairie	Steel girders
•	41	North Saskatchewan River, Elk Point	Steel girders (Commenced '83)
•	51	Blindman River, Bentley	Steel girders
Grade Separations			
•	2	Blackfalds GS, Blackfalds	Concrete girders
•	2	Acme Road GS, Airdrie	Concrete girders
•	2	Highways 2/37 GS, Morinville	Steel girders
••	2	CNR Overpass, Peace River	Extend steel bridge

On Secondary and Local Roads

River Bridges			
	SR 549	Pothole Creek, Millarville	Composite Concrete/ SPCSP *** culvert
	SR 791	Crossfield Creek, Crossfield	Composite Concrete/ SPCSP *** culvert
•	SR 840	Rosebud River, Rosebud	Steel girders
•	SR 881	Jackfish River, Conklin	Concrete girders
•	local	Pekisko Creek, High River	Concrete girders
•	local	Little Bow River, Stavely	Concrete arch culvert
	local	Mosquito Creek, Cayley	Composite Concrete/ SPCSP *** culvert
••	local	Fallentimber Creek, Sundre	Concrete girders
	local	Kneehills Creek, Linden	Salvage truss
•	local	Prairie Creek, Strachan	Concrete girders
	local	Modeste Creek, Carnwood	Salvage girders
•	local	Prairie Creek, Rocky Mountain House	Steel girders
	local	Paddle River, Sangudo	Concrete girders
•	local	Battle River, Rosalind	Concrete girders
•	local	Modeste Creek, Lindale	Concrete girders
	local	Walton Creek, Sundre	SPCSP *** culvert
•	local	BRID Canal, Vauxhall	Composite Concrete/ SPCSP *** culvert
•	local	WID Canal, Strathmore	Composite Concrete/ SPCSP *** culvert
	local	Bear River, Fort Vermilion	Concrete girders
Grade Separations			
*	SR 597	CPR Underpass, Blackfalds	Cast-in-place concrete

Bridges over SMRID and WID Canals, for Alberta Environment
24 Standard concrete girder bridges
4 Composite concrete/SPCSP *** culverts
1 Concrete box culvert

* Completed in 1985/86 but started in a prior year.
** Commenced in 1985/86 but completion carried over into following year.
*** SPCSP means Sectional Plate Corrugated Steel Pipe.

Construction & Reconstruction of Standard Type Bridges

TYPE	PRIMARY HWYS	DISTRICT ROADS	TOTAL
Standard	11	63	74
Culvert	113	270	383
	124	333	457

Bridge Repairs

TYPE	PRIMARY HWYS	DISTRICT ROADS	TOTAL
Standard	42	177	217
Culvert	20	14	34
Major	126	172	297
	188	363	548

Contracts Engineering Branch

Contracts Engineering Branch is responsible for:

- development and upgrading of contract specifications
- preparation, tendering and administration of contracts for the construction of primary highways, secondary roads, roads to provincial parks, approach roads, airports and miscellaneous projects
- assessment of contractor's claims and recommendations on the resolution of claims
- development of the schedule of rental rates for construction equipment
- co-ordination of environmental and archaeological management activities
- administration of construction material supply and procurement
- conducting an in-service survey school
- conducting engineering and final details audits
- engineering consultant selection and agreements

The branch consists of four sections: Contracts Administration, Construction Claims and Standards, Environmental Management and Materials Purchasing and Administration.

Following are the highlights of the work accomplished by the branch during this reporting period, and a summary of materials used.

Contracts Administration

Contracts Administration Section prepared and advertised 204 construction contracts during 1985/86. These included 124 contracts for grading, base and/or paving construction, 47 for gravel crushing, 26 for traffic signals, lighting and painting, and seven miscellaneous contracts. The total value of these contracts, excluding materials and engineering, was approximately $191 million.

In addition to the contracts noted above, the branch was involved in the administration of 11 contracts arising from invitational tenders put out by the districts.

Progress was made in updating construction contract specifications, on an ongoing basis.

Contract administration procedures included checking all tenders, processing five contract extensions with a value of $263 000, processing 175 letters of credit valued at $18.8 million, processing 77 subcontract approvals, processing 42 contract unit price approvals and making 16 applications to Alberta Treasury to increase contract commitments by a total of $2.6 million.

Final details and payment estimates prepared by district staff were audited for all contracts to ensure that contract payments were according to the contract and department policy. Contractual final clearances and bonds were obtained and releases of holdback and letters of credit authorized. Third party claims under the Public Works Act and contract terms were handled.

Construction records were maintained, and unit price and costs indexes were calculated. Reports were prepared on construction and other details of the highway system.

Construction Claims and Standards

Construction Claims and Standards Section, in conjunction with other branches and regional staff, developed 49 agreements with engineering and architectural consultants for engineering studies, surveys, designs and contract supervision of roadway and airport projects and architectural services for vehicle inspection station, rest area and air terminal construction.

The department's annual Schedule of Rental Rates for Construction Equipment was updated to include newer equipment models, updated serial numbers and minor revisions. The basic rates remained unchanged except for minor modifications.

The department's twenty-seventh in-service Survey School was conducted during the month of March 1986. Forty participants were selected from regional staff who had attended and successfully completed regional survey seminars. Thirty-five of the candidates were successful in attaining completion certificates. The class average was 81.5 per cent.

The internal engineering project review program was continued whereby a team, including experienced staff from other branches and districts, reviewed various projects throughout the province to ensure engineering excellence through uniformity of contract interpretation and project management, adequacy and compliance with design standards. Seven projects were reviewed during this year.

The section was also responsible for the assessment of contract claims, originating from various roadway and airport construction projects, and for the negotiation of equitable settlements. These settlements were reached by means of consultation with both contractor representatives and departmental staff. The majority of claims received were resolved without having to proceed through the litigation process.

Roadway lighting installations under the Primary Highway Lighting Program were completed at 65 new sites. These lighting installations included nine locations through urban areas, two interchanges, two roadside developments, 32 intersections with town or village approach roads and 20 at-grade

intersections. This year's major projects included a high mast pole installation at the interchange of Highways 2 and 11 north of Red Deer and a specialized lighting layout at the Nisku Interchange near the Edmonton International Airport. This special layout required that glare shields be installed on all streetlight fixtures and that floodlights with visors be placed on short straight poles where aircraft instrument landing system restrictions applied.

Twenty-two major illumination modification projects involved pole relocations, extensions to systems, changes to current lighting level standards and the conversion of 578 mercury vapour luminaires to sodium vapour. One notable modification allowed the replacement of 30 mercury vapour fixtures for the existing two-lane intersection at the junction of Highways 15 and 16 south of Mundare with 11 low pressure sodium luminaires for the improved four-lane divided highway intersection. Another project, which was cost-shared, completed the illumination and modification to high pressure sodium lighting of Highways 2A and 53 within the corporate limits of Ponoka.

In addition to these projects, four detours were illuminated to assist nighttime motorists through the intersection construction zones.

See the table on pages 20 and 21 for detailed listing of the highway lighting projects.

Environmental Management

Projects which included provisions to enhance wildlife habitat were monitored during construction and some new projects were designed to include habitat enhancement.

Archaeological Survey of Alberta carried out an extensive Impact Assessment of 407 Alberta Transportation gravel sources to develop criteria for future evaluation. All proposed grading projects and newly identified gravel sources were referred with many being scheduled for mitigation measures.

Environmental assessments were performed on all gravel pit locations which were to be used for pavement recycling operations, and special provisions were placed in contract documents to reduce possible environmental problems.

Grading designs were examined and special provisions included in the contract documents as needed. Design amendments and remedial measures were also incorporated to reduce potential environmental problems on several projects.

Material Purchasing and Administration

A total of 992 purchase orders for highway construction materials was placed to the approximate value of $155 million.

Liaison with the Purchasing Branch, highway contractors, district staff and suppliers continued, resulting in little or no delay or project shutdown.

An additional $4.5 million of drainage and fencing material was detailed to highway construction projects from Alberta Transportation's central service facilities at Edmonton and Airdrie.

Accounts payable functions were carried out for seven highway construction camps as well as Contracts, Materials and Design Engineering Branches.

Bonding, insurance policies and final signatures were obtained on 204 construction contracts.

Summary of Materials

Between April 1, 1985 and March 31, 1986 the following materials were used in contract construction work on provincial primary highways, secondary roads, airports, approach roads, and provincial park roads:

First course gravel surfacing	520 397 m^3
Subgrade backfill material	250 275 m^3
Granular base course and asphalt stabilized base course	5 954 654 t
Cement stabilized base course (sand)	898 547 t
Asphalt concrete pavement gravel	4 674 358 t
Skid resistant surface gravel	100 806 m^3
Granular supply for culverts	50 062 m^3
Gravel for haul roads	65 346 t
Recycled asphalt pavement	155 464 t
Total asphalt used	280 651 t
Total cement used	58 154 t

These volumes of gravel and sand were removed from pits:

Gravel to road	7 373 649 m^3
Gravel to stockpile	3 531 525 m^3
Sand to road	428 097 m^3

PRIMARY HIGHWAY LIGHTING PROJECTS

Highways Through Towns and Villages

Alberta Transportation Systems

HWY	THROUGH	NUMBER OF LUMINAIRES	DESCRIPTION
1	Redcliff	69	Four-Lane Construction

Municipal Systems Cost-Shared

2A	High River	85	
2A	Millet	20	
16A	Evansburg	6	
28A	CFB Edmonton	9	
35	Manning	47	
49	McLennan	38	
59	La Glace	8	Highway Construction
63	Fort McMurray Infill	100	Four Infill Locations

Approach Roads to Towns and Villages

HWY	ACCESS TO	NUMBER OF LUMINAIRES	DESCRIPTION
1	Suffield	9	2 Locations
1	Dunmore	6	
1	Irvine	10	
1	Walsh	4	
2	Granum	7	
2	Woking	4	
2A	Didsbury	5	
2A	Red Deer Airport	7	
9	Irricana	5	
12	Castor	5	
13	Daysland	4	
13	Sedgewick	6	
15	Scotford Industrial Area	9	
16	Innisfree	6	Highway Bypass Construction
16	Minburn	6	Highway Bypass Construction
16	Mannville	6	Highway Bypass Construction
16X & Calahoo Road	N. of Spruce Grove	5	New Four-Lane Construction
16X & Century Road	N. of Spruce Grove	5	New Four-Lane Construction
21 & 50	Mirror	10	
22	Cremona	5	
23	Nobleford	8	
23	Barons	7	Highway Construction
28	Smoky Lake	6	
34	Bezanson	10	Highway Construction
43	Green Court	6	
43	Rochfort Bridge	8	
43	Sangudo	8	SR 757 Access
43	Glenevis	5	
43	Yellowstone	6	
49	Girouxville	4	
69	Fort McMurray Airport	4	

At-Grade Intersections

JUNCTION	LOCATION	NUMBER OF LUMINAIRES	DESCRIPTION
1 & SR 561	E. of Strathmore	12	
1 & 41S	W. of Irvine	10	
2 & 34	W. of High Prairie	7	
8 & 22	W. of Calgary	7	
11X & 20	S. of Sylvan Lake	5	
11X & SR 596	W. of Red Deer	6	
12, 20 & 51	W. of Bentley	4	
13 & 41	N. of Czar	10	
14 & 23 Ave	E. of Edmonton	11	
15 & SR 637	N.W. of Lamont	9	
16 & 32	S. of Peers	5	
16 & R/A	S. of Lake Eden	12	
16 & 36	E. of Lavoy	7	
16X & R/A	S. of Lake Eden	3	
16X & SR 794	S. of Villeneuve	4	
16X & 60	N. of Devon	3	
21 & SR 625	S. of Looma	5	
21 & Baseline Rd	E. of Sherwood Park	8	Highway Intersection Construction
28 & 36	W. of St. Paul	7	
41 & 41A	E. of Medicine Hat	5	

Interchanges

HWY	LOCATION	NUMBER OF LUMINAIRES
2	2 & 11	116
2	Nisku	129

Roadside Developments

HWY	LOCATION	SITE LIGHTING LUMINAIRES	ADJACENT HIGHWAY LUMINAIRES	TOTAL LUMINAIRES	DESCRIPTION
2	Demmit	14	18	32	New VIS
63	Wandering River	11		11	New Rest Area

Highways Through Indian Reserves

HWY	INDIAN RESERVE	NUMBER OF LUMINAIRES	DESCRIPTION
2	Stand Off	6	Access is in the Blood Indian Reserve

Modifications of Existing Systems

HWY	LOCATION	NUMBER OF LUMINAIRES	DESCRIPTION
1	VIS 38, Strathmore	20	Retrofit from mercury vapour to high pressure sodium
2	2 & SR 597, W. of Blackfalds	-14	Removal of at-grade crossing
2	2 & 49 (Donnelly Corner)	14	Retrofit
2	Peace River	71	Retrofit
2	Fairview	21	Retrofit
2	Clairmont Access	0	Modify system and extend to north access
2A	Ponoka	120	Retrofit and extend existing system
4	VIS 4, Coutts	17	Infill Lighting
7	Black Diamond	6	Extension
9	9, 27, 56 (Morrin Corner)	13	Retrofit
13	13 & 21, W. of Camrose	6	Intersection Construction
16	VIS 29, Jasper Gate	14	Retrofit
16	VIS 19, Acheson	23	Retrofit
16	VIS 18, Ardrossan	21	Retrofit
16	16 & 15, S. of Mundare	-19	Four-lane construction modification
16	Vegreville	123	Retrofit
18	18 & 33, N. of Barrhead	17	Retrofit
28	Grand Centre	55	Retrofit
43	43 & 22, S. of Mayerthorpe	18	Retrofit
49	Spirit River	17	Highway reconstruction
53	Ponoka	68	Retrofit and extension
63	Fort McMurray	-358	Transfer Maintenance Costs to city

Design Engineering Branch

Design Engineering Branch is responsible for providing the following services for all primary highway, secondary road, airport and ancillary road construction program projects:

- preparation of information for preliminary surveys and right-of-way requests
- development and monitoring of geometric design and drafting standards
- provision of detailed geometric design and drafting services
- grading program recommendations
- provision of computerized earthwork design quantities and preparation of contract design packages
- co-ordination of utility relocations, and development of detailed project construction schedules for contract provisions
- co-ordination and design of traffic signing for highway intersections
- administration of primary highway designations
- co-ordination and management of computerized design and earthwork final quantity processing systems including co-ordination and management of computer database storage and retrieval files for departmental graphics, survey and roadway design data
- training of design, drafting and field personnel in computerized and earthwork applications.

Highlights of the work accomplished during the reporting period follow.

Roadway Design

Roadway Design Section is responsible for developing and maintaining geometric design standards, preparing right-of-way and preliminary survey requests, co-ordinating the ordering and delivery of construction materials, and performing or co-ordinating the detailed geometric design of all grading projects.

During the 1985/86 fiscal year detailed preliminary survey instructions for 81 projects totalling 963 kilometres were provided to Regional Transportation Division. These projects included multilane freeways and expressways with their associated loops, ramps and service roads, as well as rural, arterial, collector and local roads.

During this period, 1529 kilometres of cross-section data notes were reduced and plotted by computer methods to a reduced scale convenient for design purposes and field use.

Roadway Design Section designed 74 projects, co-ordinated and checked the design of 16 projects commissioned to engineering consultants, and provided varying degrees of assistance on four projects designed by field staff. In summary, detailed designs for 94 projects totalling over 840 kilometres, the majority of which were primary highways and secondary roads, were completed during the 1985/86 fiscal year.

Design Support

Design Support Section establishes drafting standards, provides both computer graphics and conventional drafting services in support of the departmental construction program, co-ordinates and manages computerized methods for design and processing of final details and co-ordinates training for computerized design, drafting and final earthwork applications.

Although drafting workloads were approximately the same as in the previous year, the drafting workforce was reduced by one permanent and seven wage staff positions during the 1985/86 fiscal year. This 16 per cent overall staff downsizing was offset by efficiencies gained in preparation of plans through use of the fully automated on-line Transportation Interactive Graphics System. Phase II implementation of this system took place in January, 1986 with delivery of three additional dual screen color Interact workstations and four single screen color Interpro 32 workstations to complement five existing dual screen Interact workstations. Design Support Section has now successfully made the transition from conventional manual drafting methods to fully automated interactive graphics computer techniques for preparation of approximately 75 per cent of the more than 3100 detailed engineering plans that were produced this reporting period to support the department's contract tendering and construction program.

The Final Earthwork Quantities Computer System generated final quantity information on 89 grading projects and in total processing was completed on 630 kilometres of new highway construction and on three airport projects. During this period 10 "Electronic Fieldbook" data collectors were successfully used by district office fieldstaff to expedite final cross-section survey data entry and data transfer over normal telephone lines to Edmonton central computer facilities, for Final Earthwork Quantity processing on approximately 15 grading projects. Successful use of "Electronic Fieldbooks" on these projects resulted in a departmental decision to acquire 30 additional "Electronic Fieldbook" devices to meet field demands.

In the area of training, a new 175 page Final Earthwork Quantity System (FEQS) training manual was developed and approximately 150 copies were distributed to district project managers and surveyors. FEQS training was also extended to include 50 additional district survey staff. As well, a 47 page "Electronic Fieldbook" operations guide was prepared and distributed to approximately 100 district field staff and training provided to 30 district survey staff on preliminary survey and grading final survey projects. Twelve district staff were trained to use the ICES COGO/ROADS design system for computerized design of their local road projects. One new release of ICES COGO/ROADS was installed this year which necessitated additional training and ongoing assistance for approximately 40 Design Engineering Branch and 20 district staff users of this system. Fourteen additional Design Support staff were trained to use the Transportation Interactive Graphics System for drafting purposes. Since one new Interactive Graphics System release was installed during this period, additional training and ongoing assistance was also provided to 35 Design Support users of this system.

Utilities and Planning

Utilities and Planning Section is responsible for co-ordinating the utility relocation/ accommodation and for resolving other encumbrances to facilitate timely construction of roadways. In addition this section initiates and develops contract special provisions for grading projects, co-ordinates all phases of work carried out on vehicle inspection stations, establishes utility drafting standards and prepares all utility plans.

During this reporting period contract special provisions were prepared for 55 grading projects tendered by the department. The preparation of the special provisions requires the development of detailed project construction schedules to ensure orderly construction progress.

Accommodation or relocation was arranged and co-ordinated for 487 pipelines, 338 kilometres of powerlines and 473 kilometres of telephone cables. The work entailed the preparation of more than 400 detailed pipeline crossing plans and the securing of an agreement for each pipeline crossing.

Also during this reporting period this section co-ordinated the planning, design and construction of two new vehicle inspection stations and maintenance work on three other stations.

Special Projects

Special Projects Section is responsible for provincial and community airport planning and design, air terminal and vehicle inspection station building planning/design and delivery, highway intersection signage design and primary highway designations.

Airport work during this period included preparing 16 conceptual design alternatives for five community and provincial airports. Designs and contract plans involving grading, base and paving were completed for six airports. Runway lighting and marking design was prepared and construction was completed during this period. This section provided a support role for the installation of 11 non-directional beacons and 24 ARCAL (pilot activated runway lighting systems). Plans and electrical co-ordination were provided to Aviation Branch for tender purposes.

The Wetaskiwin Air Terminal Building was completed and turned over to the City of Wetaskiwin for operation and maintenance. Major renovation and expansion of the High Level Air Terminal Building was planned, designed and prepared for tender during this period.

Planning and design for the Radway Vehicle Inspection Station Building was completed.

Four primary highway designation amendment orders were completed and gazetted. All signing design for new intersections, curve revisions and interchanges identified on the highway program were drafted and completed as required.

Materials Engineering Branch

Materials Engineering Branch is responsible for:

- aggregate supply and management
- structural design of bases and pavements
- testing and quality control standards and procedures for roadway and airport construction
- laboratory testing and mix design services
- pavement inventory, performance monitoring, design standards, and surfacing program recommendations
- geotechnical engineering services and standards
- training of department personnel in materials testing procedures
- providing consultative engineering services in materials-related matters
- support of departmental construction and maintenance programs.

Administration

The basic organization of Materials Engineering Branch is unchanged from 1984/85. Continued high program levels and demand for materials engineering services coupled with reduced budgets and manpower has necessitated continued efficiency increases.

Implementation of a business plan has improved utilization and motivation of human resources and increased productivity. Several job rotation assignments with engineering and technical staff was one measure utilized to develop and broaden staff capabilities. Increased utilization of personal computers accelerated data processing thus speeding and improving engineering decisions.

Aggregates Services

Aggregates Services Section is responsible for managing the aggregate supplies required for the department's construction and maintenance programs. This includes the location, sampling, assessment, acquisition and allocation of aggregate and the provision of aggregate-related specifications, recommendations and standards for aggregate source reclamation.

During the year, 11 aggregate prospecting crews, one consultant, and three district materials technologists located approximately 30.5 million cubic metres of gravel and 2.6 million cubic metres of sand.

A detailed quality assessment of aggregate sources was provided for 132 projects to determine the best blend of local aggregates appropriate to produce high quality pavements at reasonable cost.

Additional responsibilities included needs assessment and programming for winter stockpiling, and maintenance of standards and specifications covering pit operations and reclamation.

Access to the Land Status Automated System (LSAS) assisted in the gravel management process by providing information on aggregate-bearing Crown Lands administered by Alberta Forestry, Lands and Wildlife.

Geotechnical Services

Geotechnical Services Section is responsible for providing geotechnical investigation, analysis and design services and standards for the planning, design, construction and maintenance of roadways, airports and bridges.

During the past year, six crews investigated 26 bridge culvert sites, 180 preliminary roadway and airport soil survey sites, requiring 40 582 metres of drilling. Consultants were retained for several geotechnical projects.

Slope stability remedial measures, foundation stabilization, environmental control projects, and muskeg failures were the main area of special investigations.

Surfacing

Surfacing Section is responsible for establishing roadway surfacing design standards and procedures and providing designs for the department's primary highway, secondary road and airfield surfacing programs. Pavement rehabilitation and seal coat projects programs are recommended based on pavement inventory and condition monitoring.

Other section responsibilities include: preparation of specifications for surfacing materials and construction; initiation of orders for asphalt, cement and other stabilizing agents; and provision of technical and professional assistance and advice with respect to surfacing matters.

The pavement evaluation unit continued to gather information regarding the strength, smoothness and condition of existing roadway and airfield pavements for rehabilitation and reconstruction programming and design purposes.

During the year, eight Benkleman Beam crews conducted 100 222 tests on 5473 kilometres of roadways. One Dynaflect crew performed 13 026 tests on 700 kilometres of roadway and 18 airports. One highspeed roadmeter crew measured smoothness on 14 286 lane-kilometres of roadway. Two pavement condition rating crews measured 4814 kilometres of roadway. Skid resistance testing was performed on 8658 lane-kilometres of paved roadways, and about 2000 metres of bridge deck.

Special material investigations were conducted on subgrades and pavements for design purposes. These investigations required 130 metres of coring on 20 projects and 1648 metres of drilling and sampling on 26 projects.

Fifty-five frost probes, located throughout the province continued to be monitored and maintained for seasonal road ban protection of the highway system.

The quality control unit stored, analyzed and interpreted quality control data from 79 base and paving construction projects. This unit provided a summary evaluation of the quality of 1985 surfacing construction, and took important roles in updating of specifications, training of construction staff and performance of various construction-related research activities.

The materials design unit developed 342 quantity/cost estimates in preparing 194 roadway design packages, which consisted of: 36 crushing, 13 seal coat crushing, 38 first course gravel surfacing, 35 granular base course, six cement treated base course, 20 combined base course and paving, 29 paving, four reclaim/recycle paving, seven seal coat application and six miscellaneous projects. The unit also prepared 21 chip washing and 45 application estimates for department seal coat camp operations involving over 1760 lane-kilometres of roadway.

Testing Services

Testing Services Section, through the Transportation Laboratory, is responsible for providing services and standards in materials and quality control testing, mix design, materials inspector training and certification, testing equipment supply, and evaluation of new materials and processes.

The Transportation Laboratory performed more than 172 500 tests on approximately 29 000 samples of soil, aggregate, asphalt, paint and other construction and maintenance materials. One hundred and eighty mix designs and investigations were performed on asphalt and cement stabilized base and pavement materials.

Seventeen materials training courses were presented to 267 technologists and project managers, involving 97 course days and 1587 man-days of training. Field materials manuals continued to be updated as revisions and additions became necessary. Projects were supplied with 555 kits of testing equipment.

A computerized equipment inventory control system was designed and implemented to replace a labour intensive manual system. Approximately 6000 different stock items totalling 250 000 pieces were counted, classified, coded and entered into the system.

The field services unit visited 114 construction projects to monitor and assist with plant calibrations, testing procedures, quality control and testing problems. Technical assistance was provided to the department Project Review Committee on seven projects.

During this fiscal year, the special projects unit continued its investigations into such products and projects as asphalt, calcium chloride, flyash, pavement reinforcement, computerized pavement roughness measurement, asphalt pavement recycling, stabilization materials and asphalt concrete segregation.

Laboratory studies continued into the problem of asphalt recycling emissions. Two branch members also participated in the special government industry task force that was established to study this issue, and the findings of this committee were used to initiate demonstration recycling projects.

Property Services Branch

The Property Services Branch is responsible for:

- establishing provincial standards for right-of-way negotiation and purchase
- monitoring and accepting agreements negotiated by regional property agents
- reviewing and clearing encumbrances prior to payment for right-of-way
- initiating expropriation proceedings under The Expropriation Act when necessary
- legally surveying and registering land acquired for transportation facilities
- processing bylaws and applications for road closure or cancellation of roads under the jurisdiction of the Minister of Transportation, pursuant to Public Highways Development Act and the Municipal Government Act
- managing documentation related to payments in lieu of municipal taxes and department ownership of property.

Highlights of the work accomplished during the reporting period follow for each of three functional sections of the branch.

Appraisal and Negotiation

In co-operation with the regional property managers and agents, this section assisted negotiations, monitored land values throughout the province, and determined acceptability of purchase agreements for payment. A total of 1300 agreements were accepted and processed.

During the year 10 expropriations were commenced and 40 agreements signed under Section 30 of the Expropriation Act. Fifty-two independent appraisals were carried out for the department by private appraisal consultants.

Expropriations carried over from previous years	Full Expropriations	26
	Section 30 Agreements	29
New expropriations	Full Expropriations	10
	Section 30 Agreements	40
Expropriations settled or terminated	Full Expropriations	15
	Section 30 Agreements	21

Compensation

Compensation payments for land purchased during the reporting year were processed in the following total amounts:

Primary highways and secondary roads	$ 3 973 855
Distnct Roads	673 103
Stock Advance Fund - Purchases	5 399 505
Airports	4 830
Land Purchase Fund -Purchases	256 563
	$ 10 307 856

Approximately 18 000 title searches were made in Land Titles Office, Edmonton and 9500 in Calgary. The searches were made to determine land ownership; to assist with highway planning; to facilitate negotiations or to examine encumbrances related to payment of compensation.

Legal Surveys and Conveyancing

During the reporting period, 289 legal surveys were completed for land required for transportation facilities. Of these, 144 were commissioned to private surveyors involving 58 different surveyors, for a total cost of $502 290 and 145 were carried out by staff land surveyors. Six hundred and sixty-eight new road plans were registered at the Land Titles Office.

A summary of activities follows:

Legal Surveys	
Surveys completed	289
Conveyancing	
Titles received	78
Notifications to Registrar cancelling roads	346
Letters of Abandonment	35
Municipal Road Closure Bylaws	153

Research and Development Branch

Research and Development Branch primarily focuses on practical and applied research aimed directly at improving development, maintenance and operation of the transportation physical plant (highways, roads, bridges and airports) and departmental equipment. The role of the branch is to:

- co-ordinate all departmental research to ensure it is designed, documented and followed through according to a scientific approach
- avoid duplication of research effort
- ensure dissemination of research results
- undertake certain research projects directly.

To aid the branch in this role, an Applied Research Policy was formally adopted in the department and a Departmental Research Advisory Committee was struck to advise on the need and priority of proposed research. The branch is the primary department contact and co-ordinator of co-operative research with outside agencies, such as the Roads and Transportation Association of Canada (RTAC), Alberta Research Council and Alberta universities.

The branch provides departmental representation nationally to the Council on Highway & Transportation Research and Development (CHTRD) and internationally, on behalf of RTAC, to the American Association of State Highway and Transportation Officials (AASHTO) Select Committee on Research, which advises and votes on the National Co-operative Highway Research Program (NCHRP), and to the Executive Committee on the United States Crescent Study. The branch also provides departmental representation to several technical committees of RTAC and has been actively involved in the definition of the proposed Canadian Strategic Highway Research Program (CSHRP), aimed at maximizing the benefits to Canada of the upcoming $150 million United States Strategic Highway Research Program (SHRP).

Co-operative research, sponsored nationally through RTAC and receiving support from this and all other provinces, included:

- two-lane rural highway capacity and level of service (phase II)
- priority rules of the road for public transit
- update and expansion of guardrail/traffic barrier standards
- the use of computer aided design techniques in highway engineering
- computer software inventory database
- Canadian case studies of bridge waterway openings
- revision and update of geometric design standards for Canadian roads and streets
- geometric design standards for low volume roads
- durable concrete repair techniques
- pavement condition rating system development
- highway transportation infrastructure study (HITRIS)
- uniform special crosswalks
- high speed pavement strength testing vehicle
- heavy vehicle configuration optimization
- guidelines for the cost effective use and application of dust palliatives
- bridge capacity assessment from variations in axle spacing and heavy vehicle configurations
- salt budgeting for water resource protection
- preparation of new manual on drainage design procedures and practices
- energy compendium update.

The following co-operative research was conducted with provincial institutes:

Research with Alberta Universities

- development of test procedures and material properties for evaluating geotextiles for soil reinforcement
- design methodology for geotextile reinforced soil slopes
- cement treated base courses in pavement structures
- evaluation of pavements with relatively low incidence of thermal cracking
- characteristics of recycled asphalt concrete materials
- fish swimming performance data for culvert design
- planning and design of passing lanes (simulation)
- maximum allowable loads for existing G-stringer bridges.

Research with Alberta Research Council

- scours surveys
- rip-rap study
- ice loads on piers
- ice-pier interaction
- peak runoff
- pavement management system
- pavement design and evaluation
- geotechnical engineering research
- highway capacity studies
- vehicle weight and dimension research
- monitoring of design parameters of solar powered culvert thawing device.

In addition, using its own or private sector resources, the branch completed 12 projects. The most notable and by far the largest was the development of the Mobile Highway Inventory System which was completed and transferred to Corporate Planning Services Branch as a production system for gathering highway inventory and videologging at highway speeds. This system has a life expectancy of at least 10 years.

The branch undertook the following 32 new research projects:

Transportation Safety and Equipment

- videologging of national park highways in Alberta for Parks Canada
- Performance review of glass beads for pavement delineation
- automated vehicle identification system development
- vehicle classification system testing
- evaluation of sonic animal warning devices
- ice detection system evaluation for safety and maintenance
- application of programmable logic controllers
- sharp shoulder delineation techniques
- infrared thermography synthesis, for measuring bridge deck delaminations
- upgrading of Dynaflect system
- metering systems for paint flow
- hopper sander experimental hydraulic system
- evaluation of various automatic devices for sand/salt spreading operations
- development of high speed pavement condition evaluation vehicle
- steering axle weight monitoring device
- speed governor evaluation for paint machines.

Materials and Operations

- evaluation of improved torch for cracksealing operations
- evaluation of cold plastic road marking material
- synthesis of performance of various de-icing chemicals
- evaluation of beaver deterrent devices for culverts
- graffiti removal product evaluation
- non-paved shoulders for highways synthesis
- investigation of temperature effects on pavement rutting
- minimizing brine pollution effects from sand/salt piles
- synthesis on methods of reducing/eliminating reflective cracking
- laboratory testing of compatibility of sodium formate for highway de-icing
- accelerated laboratory testing of portland cement concrete patching materials
- effects of backslope angle on snow accumulation
- synthesis of methods for reducing/eliminating the need for removal of crackfiller
- synthesis on the effects of using salt for de-icing
- calibration of moisture probes for various field trials
- synthesis of stabilization treatment of silty soils.

Transportation Library

The Transportation Library provided a variety of information services to all branches, regions and districts, to other provincial government agencies and to the public. The library contains approximately 12 000 books, 8000 technical reports, 450 periodical titles, 5000 reports on microfiche from the U.S. Department of Transportation and various statutes, regulations, standards, maps, annual reports and audiovisual items.

During the year, library staff responded to nearly 2400 'quick' and 400 indepth requests for information, ordered or renewed 1500 publications, and loaned over 4200 items, nearly a 10 per cent increase from the previous year. Another 400 items were borrowed from or loaned to different North American libraries. Two hundred literature searches were conducted on various computerized bibliographic databases as part of the library's research service, while 800 articles were sent to department staff through the current information scanning service. In addition, regional and district employees requested nearly 900 books, reports and articles from the Library Bulletins.

During 1985/86, library staff updated the computer-generated keyword indexes to conference papers from Roads and Transportation Association of Canada (RTAC 1971-1985) and Western Association of Canadian Highway Officials (WACHO 1961-1985). Another major project was the preparation of a batch keyword index to the U.S. Department of Transportation Reports.

REGIONAL TRANSPORTATION DIVISION

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Executive Director

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T. Watt
Director

Construction Programming Branch 32

C.D. Burton
Director

Occupational Health and Safety Section 39

C. Kopeck
Manager

Operations Branch 40

E. Belsheim
Director

Regional Directors 44

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R. Comchi
South Central Region No. 2
B.W. Kathol
Central Region No. 3
D.J. Bussard
North East Region No. 4
H. Hetu
North West Region No. 5
C. Lendzion
Peace Region No. 6
R.G. Sharp

The *Regional Transportation Division* is responsible for the development, scheduling and fiscal control of the major construction programs together with management and field implementation of the construction and maintenance of the provincial transportation system. The division is comprised of the Construction Programming Branch, Operations Branch and the Occupational Health and Safety Section, with the field implementation handled by six regional directors located in strategic centres throughout the province.

Specifically, the division is responsible for the programming, management and field delivery of the following elements:

- regional administration
- construction programming
- construction and maintenance of primary highways
- construction and maintenance of approach roads
- construction of roads to provincial parks
- construction of vehicle inspection stations
- construction of Grande Cache to Grande Prairie highway
- construction of secondary roads
- construction and maintenance of forestry roads
- construction and maintenance of improvement district roads
- resource roads improvement program
- construction of special projects
- pavement rehabilitation
- construction and maintenance of campsites and rest areas
- construction, maintenance and operation of ferries
- grants to counties and municipal districts
- grants to special areas
- Public Transportation Operating Assistance Grant
- Improvement District Trust Account Program
- construction of Kananaskis Country projects
- construction of provincial airport facilities
- construction of community airport facilities
- maintenance and operation of provincial air facilities.

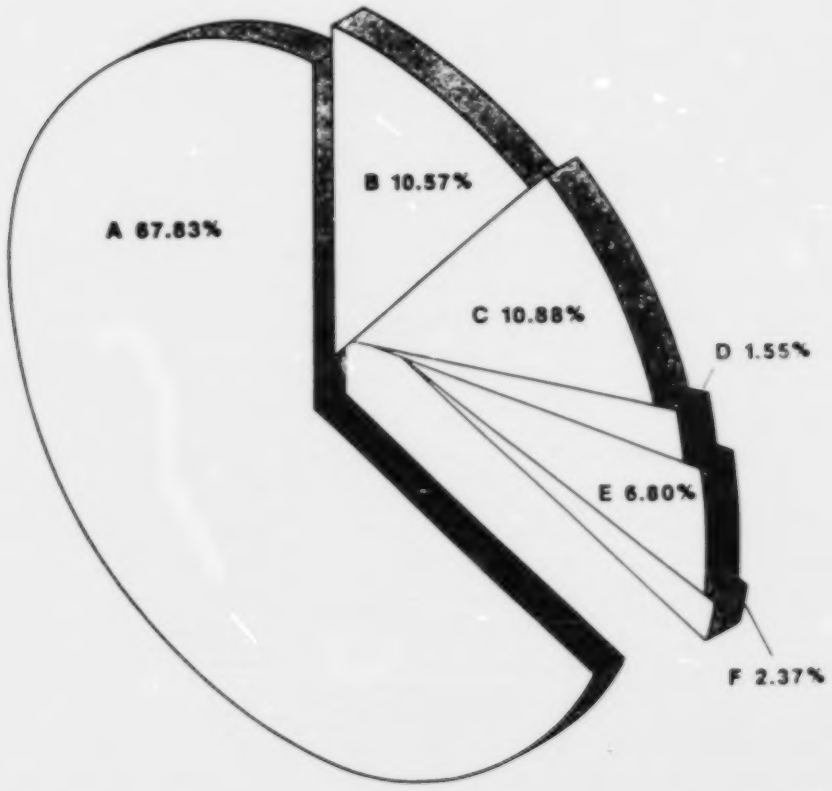
In the 1985/86 season, as a result of an early spring start the department was able to deliver the largest construction program ever in the province in spite of the early onset of winter, which resulted in a number of projects not being completed and carried over to 1986/87. As a result of the early winter, a major initiative was developed to provide winter work opportunity for labourers, small heavy equipment owners, gravel crushers and dump trucks which resulted in the build up of gravel inventories and readied projects for the 1986/87 program. Under the Winter Works Program 5 942 888 tonnes of gravel was stockpiled, 2 148 386 tonnes of gravel was crushed, 2980 hectares (7330 acres) of rights-of-way were cleared, 3438 intersection quadrants were cleared and 26.5 kilometres of roadway, primarily through muskeg areas, were constructed. Some 2781 trucks were employed on 48 stockpiling projects. Additionally, 765 units of heavy construction equipment and 1796 people were employed on the stockpiling, clearing and grading projects.

Under the construction programs, improvements were made to approximately 3046 kilometres of roadways and maintenance operations were performed on approximately 33 059 kilometres of roadway under the primary highway and improvement district programs.

Regional Transportation Division staff continued to work closely with the various municipal and improvement district councils and local people in dealing with and resolving local transportation concerns.

An analysis of Regional Transportation's total expenditures, by major categories of activity, is shown in Figure 1. Details of the work undertaken by Regional Transportation's branches are reported on the pages which follow.

1985/86
REGIONAL TRANSPORTATION EXPENDITURES



A. Major construction of primary highways (including Hwy. 40); secondary, approach, park, and resource roads; pavement rehabilitation; and special projects: 67.83%
B. Maintenance of highways and ferries: 10.57%
C. Construction and maintenance of improvement district roads: 10.88%
D. Construction and maintenance of airports and airstrips: 1.55%
E. Grants to counties, municipal districts, towns, villages and special areas: 6.80%
F. Regional administration: 2.37%

Construction Programming Branch

The responsibilities of the Construction Programming Branch include development of the department's road construction programs, the scheduling and delivery of the construction programs, the control of the associated budget components and the programming, development and management of all grant programs.

The work is handled by three sections: Program Development, Program Management and Municipal Services.

Program Development

This section is responsible for system and budget analysis, program development and advance scheduling of the following major capital programs:

- Primary Highways Construction Program
- Pavement Rehabilitation Program
- Kananaskis Country Program
- Secondary Roads Program
- Resource Road Improvement Program
- ring roads and inter-city connections
- Approach Roads Construction Program
- Park Roads Construction Program
- Special Projects Construction Program
- Highways 1 and 16 Four-Lane (twinning) Program
- special programs.

This section is also responsible for advance program co-ordination of the primary highway construction schedule, the bridge construction program, and the Vehicle Inspection Station Program.

Program Management

The Program Management Section is responsible for the management and the delivery, within budget, of the following programs:

- construction of primary highways (including the twinning program for Highways 1 and 16)
- construction of approach roads
- construction of roads to provincial parks
- construction of vehicle inspection stations
- construction of secondary roads
- Grande Cache to Grande Prairie highway
- improvement of resource roads
- special projects
- pavement rehabilitation
- construction of provincial and community airports
- construction of roads in Kananaskis Country
- crushing under the Transportation Revolving Fund.

To ensure delivery of the construction programs, the section co-ordinates, schedules and manages interdepartmental engineering activities, monitors engineering, right-of-way acquisition and construction activities and progress, maintains expenditure control to ensure delivery within budget and liaises with outside agencies.

Additional responsibilities include analysis of industry capability and provision of support services to the Regional Transportation Division, and contractor liaison as necessary for timely delivery of construction programs.

Construction of Primary Highways

The main emphasis of the primary highways construction program continues to be the upgrading of older highways, the strengthening of existing pavement structures, and the extension of the graded and paved network to meet the transportation demands associated with industrial, commercial, agricultural, commuter and tourist traffic throughout the province.

Multilaning of the highly congested routes continued to be a priority and construction was completed during the reporting period on:

- Highway 1, junction SR 524 to Redcliff
- Highway 1, east of junction SR 842 to east of junction Highway 56
- Highway 16, west of Blackfoot to Lloydminster
- Highway 16, east of SR 834 to junction Highway 15
- Highway 16, west of Innisfree to east of Mannville
- Highway 16X, junction Highway 16 to Edmonton
- Highway 21, junction Highway 16 to north of Fort Saskatchewan.

Construction continued on the following and will be carried forward for completion in 1986/87:

- Highway 2, St. Albert to north of junction Highway 37
- Highway 16, west of Kitscoty to west of Blackfoot
- Highway 16, west of Highway 47 to Edson.

Construction was commenced on:

- Highway 1, north of Bassano to north of Lathom
- Highway 2, north of junction Highway 37 to north of Morinville
- Highway 16, junction Highway 15 to west of Vegreville
- Highway 16, west of junction Highway 40 to Hinton.

Consulting engineering firms, working for the cities, towns, and villages, under the terms of an agreement with the department made improvements to five primary highways through five cities, towns and villages. Of these, three were carried forward from 1984/85 and one was carried over to 1986/87 for completion.

During the reporting period construction was completed on 949.85 route kilometres of which 114.34 kilometres were constructed under the twinning program. This included the extension of new paved surfaces on 474 kilometres.

Expenditures for primary highway construction totalled $286 423 456. The different types of work undertaken by kilometre were:

	REGULAR PROGRAM	TWINNING PROGRAM HIGHWAYS 1 & 16
Grade	252.54	90.67
Granular base course	371.39	72.65
Asphalt stabilized base course	340.30	—
Cement stabilized base course	121.15	—
Asphalt surface	368.20	139.51
Recycled asphalt pavement	40.54	—
Preliminary engineering	285.47	72.01
Dust abatement	—	—
Skid resistant surface	692.89	—
Street improvement	2.85	—
Consulting Engineering	67.37	—
Gravel	26.91	—
Reclaimed asphaltic pavement	18.96	—
Total task-kilometres	2588.57	374.84

Construction of Approach Roads

Construction of approach roads to towns, villages and hamlets from highway routes continued to be co-ordinated with major projects in the area. Access projects to 23 communities were under way during 1985/86; 12 of these projects were carried over from 1984/85, four will be carried over to 1986/87 for completion. Construction affected 25.26 route-kilometres. Expenditures totalled $2 419 782.

The different types of work undertaken by kilometre were:

Grade	3.45
Granular base course	10.89
Asphalt stabilized base course	3.32
Asphalt surface	18.80
Preliminary engineering	0.36
Skid resistant surface	0.79
Total task-kilometres	37.61

Construction of Roads to Provincial Parks

A total of 22.60 route-kilometres of road were constructed to provincial parks for an expenditure of $2 002 780.

Major projects included the completion of grading on the road to the Willow Creek Provincial Park, and completion of the base course to Big Knife Provincial Park. Grading was commenced on the road to Dry Island Buffalo Jump Provincial Park and to Hasse Lake Provincial Park. In addition to these projects the paving of the access to Moose Lake Provincial Park is carried over to 1986/87.

The different types of work undertaken by kilometre were:

Grade	19.81
Granular base course	2.79
Asphalt stabilized base course	2.79
Preliminary engineering	2.92
Total task-kilometres	28.31

Construction of Vehicle Inspection Stations

The Vehicle Inspection Station Program involves the construction of entrance, exit, and bypass lanes, parking areas, buildings and site development for these facilities. A scale installation was completed at Balzac and a new building was constructed at the Whitecourt site. Expenditures totalled $379 703.

Highway 40 Project

During the reporting period two clearing projects were completed and one was carried over to 1986/87; two gravel crushing projects were completed and seven bridge structures were completed with another 10 bridges to be completed in 1986/87. Eight major grading projects were completed; another eight grading projects were carried over to 1986/87 on the Grande Cache to Grande Prairie highway. Work also continued on the Forestry Trunk Road with three clearing projects, one gravel crushing project and four grading projects being completed. Four grading projects were carried over to 1986/87. Construction was completed on the access routes to the Musreau Lake campground and day use area, Kakwa River recreation area, Simonette campground and day use area and the Economy Lake campground with funding provided to Energy and Natural Resources so they could accomplish the work.

With an expenditure totalling $28 673 764, 182.42 route-kilometres were constructed.

The different types of work undertaken by kilometre were:

Grade	101.82
Preliminary Engineering	26.78
Construction Engineering	21.61
Total task-kilometres	150.21

Construction of Secondary Roads

Secondary road network improvements continued to be a major priority with municipal district, county, special areas and improvement district councils. Improvements in the various construction categories were undertaken on 956.57 route-kilometres of secondary roads.

Improvements were made to secondary roads through nine towns, two of which were carried over from 1984/85 and three were carried over for completion in 1986/87. This work was directed by consulting engineering firms working for the urban municipalities under agreement with the department.

One project was performed under an agreement with Keyano College, as a training program for equipment operators under actual field conditions.

Expenditure for the Secondary Road Program totalled $100 531 393.

The different types of work undertaken by kilometre were:

Grade	356.23
Granular base course	308.16
Asphalt stabilized base course	269.28
Cement stabilized base course	30.80
Asphalt surface	300.44
Preliminary engineering	464.72
Dust abatement	432.10
Skid resistant surface	179.93
Street improvement	9.23
Construction engineering	69.65
Gravel	114.99
Total task-kilometres	2535.53

Special Projects

Under the Special Projects Program $4 317 710 was spent on improvements to Highway 67.

Grading from junction SR 750 to south of 22nd baseline was started in 1985/86 and 23.28 route-kilometres were completed.

The different types of work undertaken by kilometre were:

Grade	23.28
Total task-kilometres	23.28

Improvement of Resource Roads

The demand continued, during this reporting period, for improvements to roads impacted by resource traffic. High standard roads were constructed to expedite the operation of resource and industrial traffic on a year round basis and to reduce the impact on surrounding roads in a particular area.

Improvements were made to 445.26 route-kilometres of road for a total expenditure of $46 035 020.

The different types of work undertaken by kilometre were:

Grade	260.10
Gravel	164.94
Cement stabilized base course	0.05
Granular base course	82.92
Asphalt stabilized base course	72.69
Asphalt surface	109.44
Preliminary engineering	156.29
Skid resistant surface	11.92
Dust abatement	14.25
Street improvement	2.44
Construction engineering	25.06
Engineering	50.20
Total task-kilometres	950.30

Pavement Rehabilitation

Increased traffic volumes, heavier loading, an aging pavement system and highly fluctuating seasonal temperatures common throughout Alberta has increased the severity of stress on the province's paved highways. Many of the older pavements require restoration, repair and strengthening. To protect the existing investment and structural integrity of the pavement structures, a program of pavement rehabilitation was continued and significant progress was made in restoring these older pavements to a rejuvenated condition.

During the past year, two projects included recycling of existing asphaltic pavement in an area where raw aggregate is in short supply.

Pavement rehabilitation was undertaken on 412.73 route-kilometres of highways at a total cost of $46 326 208.

The different types of work undertaken by kilometre were:

Grade	5.58
Granular base course (pavement overlay)	18.92
Asphalt surface	418.55
Recycled asphalt concrete pavement	11.32
Total task-kilometres	454.37

Airport Construction:
Provincial and Community Airports

Among the major activities in the Provincial Airport Program were the completion of paving and lighting of the Cooking Lake Airport and a start on the construction of a paved runway at Fox Creek. Installation of non-directional radio beacons continued, along with the purchase of distance measuring equipment to be installed on various airports. One microwave landing system was acquired for installation on the High Level Airport.

The Community Airport Program saw the completion of paving and lighting of the Sundre Airport, completion of grading, seeding and lighting at Rimbey and a start on regrading for a paved runway at Beaverlodge.

Pavement overlays or slurry seals were applied on several airports as part of a pavement rehabilitation initiative to preserve the investment in existing airports.

A number of grants were made to communities to assist in the construction of suitable air terminal buildings for local airports.

Expenditures incurred in the development of airport facilities totalled $7 617 068.

CONSTRUCTION OF PROVINCIAL AIRPORT FACILITIES

Expenditures for 1985/86

AIRPORT LOCATION	TYPE OF WORK	TOTAL EXPENDITURES
Calling Lake	Turf runway	$ 319 036
Cooking Lake	Runway paving	829 865
	Maintenance garage	60 510
	Runway lighting	122 689
Drumheller	Non-directional beacon	15 272
Edson	Lighting	31 879
Fox Creek	Runway grading	229 354
Graham Lake	Lighting	15 183
Grande Cache	Non-directional beacon	16 421
Lac La Biche	Lighting	16 304
Lloydminster	Microwave landing system	77 298
Manning	Lighting	20 241
Pincher Creek	Drainage	25 536
Red Earth	Clearing	171 554
Spirit River	Non-directional beacon	10 084
Swan Hills	Non-directional beacon	14 695
	Drainage	22 400
Wabasca	Lighting	18 887
	Non-directional beacon	12 183
Whitecourt	Parking apron and development area	154 472
Head Office	Purchase of hardware for electronic navigation air systems and weather reporting equipment, also includes small misc. projects	2 130 222
Head Office	Architectural design of High Level Air Terminal	118 015
		$ 4 432 100

CONSTRUCTION OF COMMUNITY AIRPORT FACILITIES

Expenditures for 1985/86

AIRPORT LOCATION	TYPE OF WORK	TOTAL EXPENDITURES
Bashaw	Clean up, seeding	$ 58 038
Bassano	Paving, clean up	17 754
	Lighting	17 089
Beaverlodge	Grading for paved runway	137 121
Bonnyville	Runway extension	116 566
Brooks	Pavement overlay	238 938
Claresholm	Pavement overlay	238 938
DeBolt	Lighting	40 636
Fairview	Gravel extension to runway	50 150
Forestburg	Project cleanup	35 575
	Lighting	17 267
High River	Grant - crosswind strip	15 000
Lacombe	Fencing	18 970
La Crete	Grading, seeding	91 749
Mayerthorpe	Pavement overlay, drainage	252 144
Red Deer	Pavement overlay	287 091
Rimbey	Grading, seeding	239 127
Stettler	Slurry seal runway	92 407
Sundre	Lighting	54 147
Valleyview	Slurry seal runway, complete development area	225 932
Wainwright	Extend parking apron	43 386
Head Office	Purchase and install radio control runway lighting units, also includes small misc projects	80 426
Head Office	Air terminal building grants	347 500
		$ 3 182 477

Municipal Services

The Municipal Services Section is responsible for the planning, program development and management of the following construction and maintenance programs within the improvement districts:

- improvement district road construction
- improvement district road maintenance
- improvement district trust account
- forestry road construction and maintenance.

The section also administers and monitors grant programs for towns, villages and rural municipalities. During the reporting period these programs involved:

- grants to counties and municipal districts
- grants to special areas
- street assistance to towns and villages
- engineering assistance program
- Public Transportation Operating Assistance Grant Program.

Additionally, Municipal Services liaises with other government departments and agencies, as well as interdepartmentally, to effect the necessary approvals and agreements for construction projects in these programs.

Improvement District Construction

A total of $16 889 960 was expended on capital construction projects on local and secondary roads within 14 improvement districts during the reporting period. An amount of $8 375 757 was provided for construction of access and internal roads under the Indian Reserve and Metis Settlement Access Program.

Through the Winter Works Program, $5 342 313 was expended on local winter road construction, gravel stockpiling and crushing projects.

The Public Lands Division of Alberta Energy and Natural Resources continued to open up new lands for settlement during this period and 65.6 kilometres of access road was constructed at a cost of $2 326 008. This initiative was further enhanced during this reporting period, with the development of The Roads to Existing Farmlands Without Access Program. A total of $1 949 050 was expended to construct 52.6 kilometres of access road in this regard.

One improvement district hamlet benefited from the Hamlets Streets Assistance Program resulting in an expenditure of $160 669 on road and street improvements.

Improvement District Maintenance

There are 18 648.3 kilometres of secondary and local roads in improvement districts and 467.3 kilometres of public roads within Indian Reserves. These roads required an expenditure of $14 640 635 for the summer and winter maintenance operations.

Improvement District Trust Account

Alberta Municipal Affairs provided the department with $16 807 318 from tax revenues for transportation projects in the improvement districts.

The work undertaken with trust funds on improvement district roads, by kilometre, was:

Grade	152.10
Gravel	2936.80
Dust Abatement	76.00
	3164.90

Construction and Maintenance of Forestry Roads

An expenditure of $3 807 476 was incurred on the construction and maintenance of 3514.07 kilometres of forestry roads. The projects undertaken were established through consultation with the Alberta Forest Service Branch of Alberta Energy and Natural Resources.

Grants to Counties and Municipal Districts

The program provides grants to 30 counties and 20 municipal districts for construction and upgrading projects and related works.

The program is divided into four major sub-programs: Regular Road Grants, Special Projects, Hamlet Street Assistance, and the Winter Works Program. The expenditure breakdown for each category was:

Regular Road Grant	$ 23 841 587
Special Grant	1 965 846
Hamlet Streets Assistance Grant	1 737 506
Winter Works Program	2 150 702
	$ 29 695 642

Grants to Special Areas

The department provided a regular grant of $1 528 000 to the Special Areas Board to assist with required capital road construction projects within Special Areas 2, 3 and 4.

Alberta Municipal Affairs is the road authority for special areas. Forces under the direction of the Special Areas Board undertake road construction. Similar to the Regular Road Grant, this grant is based upon a formula which takes into account road mileages, population, the terrain factors of the region and equalized assessments.

Engineering Assistance Program

This program provided $756 918 to counties, municipal districts and special areas for the required engineering work associated with their Regular Road Grant projects. The amount allotted is based on the level of the municipalities Regular Road Grant allocation. This grant is used to engage private engineering consultants or to cover engineering services provided by Alberta Transportation.

Street Assistance in Towns and Villages

The current five year street assistance program was commenced on April 1, 1984. The program provided $11 879 091 in the 1985/86 fiscal year for towns, villages and summer villages, for a total of 95 approved projects. Each municipality is eligible to receive their full entitlement once during the five year period. The population figures provided in June of the previous year by Alberta Municipal Affairs is utilized to determine the eligibility for each municipality annually. The program is designed as a cost share initiative.

Public Transportation Operating Assistance Grant

The Public Transportation Operating Assistance Grant Program was implemented April 1, 1979, and the program was renewed on April 1, 1985 for three years to March 31, 1988. The program provides assistance for senior citizens, the disabled and the handicapped in the development of specialized transportation service and/or, the subsidization or upgrading of the existing transportation services in a municipality.

The $3 per capita grant funding in 1985/86 was distributed as follows:

Towns	$ 980 835
Villages	141 018
Counties	668 718
Municipal Districts	327 978
Improvement Districts	173 568
Special Areas	18 126
	$ 2 310 243

Improvement Districts

IMPROVEMENT DISTRICT	TRUST FUNDS	MAINTENANCE	CONSTRUCTION	FORESTRY ROADS
5	$ 50 000	$ 845 007	$ 112 100	$ —
6	300 000	296 513	49 919	172 338
7	90 000	50 039	237 074	—
8	110 000	438 874	192 711	271 975
MD 99	—	—	28 829	706 156
14	2 826 459	1 262 663	1 719 375	169 997
15	1 557 526	464 215	1 788 555	227 111
16	2 520 000	1 136 074	3 111 520	749 199
17	2 500 163	3 384 924	4 701 278	1 270 975
18	3 385 000	1 747 828	2 231 364	169 402
19	507 705	555 014	2 606 602	—
20	659 918	654 289	2 124 653	17 636
21	550 000	1 027 711	1 919 902	—
22	824 979	1 162 473	2 502 679	27 482
23	925 568	901 678	3 341 441	25 215
	$ 16 807 318	$ 13 927 302	$ 26 668 002	$ 3 807 477

Indian Reserves

DISTRICT				
2	—	133 594	3 083 579	—
4	—	185 845	1 096 480	—
6	—	61 199	217 873	—
7	—	30 241	47 140	—
9	—	66 714	71 150	—
11	—	129 535	887 810	—
12	—	83 395	2 686 342	—
13	—	—	36 860	—
15	—	22 812	248 524	—
	—	713 335	8 375 758	—
	$ 16 807 318	$ 14 640 637	$ 35 043 760	$ 3 807 477

GRANTS TO COUNTIES AND MUNICIPAL DISTRICTS

Expenditures for 1985/86 fiscal year

COUNTY	EXPENDITURE
Athabasca	$ 1 331 278
Barrhead	589 694
Beaver	585 957
Camrose	647 744
Flagstaff	568 665
Forty Mile	1 012 298
Grande Prairie	1 308 351
Lac Ste. Anne	725 674
Lacombe	454 903
Lamont	465 774
Leduc	877 890
Lethbridge	524 204
Minburn	596 536
Mountain View	507 434
Newell	620 893
Paintearth	329 660
Parkland	811 728
Ponoka	502 296
Red Deer	602 548
St. Paul	711 016
Smoky Lake	706 693
Stettler	523 910
Strathcona	777 319
Two Hills	471 238
Thorhild	559 683
Vermilion River	835 728
Vulcan	649 083
Warner	605 035
Wetaskiwin	678 134
Wheatland	451 193

MUNICIPAL DISTRICT	EXPENDITURE
Acadia	192 179
Bonnyville	491 588
Cardston	427 184
Clearwater	580 021
Cypress	733 995
Fairview	306 934
Foothills	532 861
Kneehill	483 242
Peace	136 570
Pincher Creek	223 564
Provost	348 634
Rocky View	620 303
Smoky River	822 844
Spirit River	417 640
Starland	360 645
Sturgeon	628 450
Taber	567 868
Wainwright	431 443
Westlock	703 012
Willow Creek	625 426
	$ 29 666 962

ENGINEERING SUPPORT

1985/86 fiscal year

COUNTY	EXPENDITURE
Athabasca	$ 17 127
Barrhead	35 021
Beaver	14 000
Camrose	16 325
Flagstaff	16 000
Forty Mile	23 349
Grande Prairie	29 000
Lacombe	13 000
Lac Ste. Anne	17 000
Lamont	11 208
Leduc	16 000
Lethbridge	17 788
Minburn	13 000
Mountain View	14 000
Newell	14 269
Paintearth	10 210
Parkland	21 000
Ponoka	15 000
Red Deer	17 000
St. Paul	16 017
Smoky Lake	333
Stettler	9 756
Strathcona	11 000
Two Hills	10 023
Thorhild	16 782
Vermilion River	20 000
Vulcan	20 137
Warner	11 537
Wetaskiwin	13 000
Wheatland	14 000

MUNICIPAL DISTRICTS	EXPENDITURE
Acadia	4 282
Bonnyville	13 000
Cardston	14 113
Clearwater	10 636
Cypress	15 000
Foothills	15 000
Kneehill	15 261
Peace	3 204
Pincher Creek	10 919
Provost	9 460
Rocky View	19 000
Smoky River	17 000
Spirit River	4 688
Starland	12 686
Sturgeon	16 000
Taber	17 931
Wainwright	11 000
Westlock	16 799
Willow Creek	12 421
	$ 756 919

STREET ASSISTANCE IN TOWNS AND VILLAGES

TOWNS & VILLAGES	EXPENDITURE
Alix	$ 4 676
Athabasca	193 960
Barnwell	70 103
Barrhead	301 872
Bassano	64 990
Beaumont	296 346
Beiseker	96 840
Berwyn	98 920
Betula Beach	3 352
Big Valley	61 306
Birchcliff	19 240
Blackie	71 225
Black Diamond	168 313
Bow Island	164 920
Boyle	99 240
Bruderheim	8 478
Carstairs	101 571
Castor	134 840
Champion	75 400
Chauvin	3 925
Chipman	79 420
Claresholm	319 998
Cluny	31 461
Clyde	49 627
Coaldale	462 440
Coalhurst	71 954
Crossfield	47 664
Czar	23 747
Daysland	101 720
Dewberry	1 159
Didsbury	194 018
Donnelly	63 533
Drayton Valley	433 141
Eaglesham	38 600
Edberg	45 351
Edson	143 876
Edmonton Beach	48 677
Empress	64 902
Entwistle	20 331
Evansburg	131 099
Fort Saskatchewan	538 725
Fox Creek	5 728
Gibbons	254 600
Girouxville	71 000
Glendon	56 054
Granum	62 572
Grimshaw	244 040
Halfmoon Bay	18 360
High Level	269 480
Hinton	430 417
Holden	38 947
Hussar	59 000
Hythe	140 377
Island Lake	19 524
Killam	125 080
Kinuso	40 548
Kitscoty	36 578
Lac La Biche	148 189
Lakeview	1 065
Milk River	48 395
Millet	159 240
Nampa	79 800
New Norway	69 720
Norglenwold	31 650
Okotoks	436 258
Picture Butte	169 960
Provost	183 720
Rainbow Lake	113 480
Raymond	82 425
Redcliff	340 825
Rimbey	192 840
Rocky Mountain House	454 709
Rosemary	49 752
Rumsey	34 406
Rycroft	96 043
Seba Beach	54 153
Sedgewick	118 840
Smoky Lake	21 239
South Baptiste	18 760
Standard	25 408
Stavely	123 840
Strathmore	81 067
Sundre	5 164
Three Hills	311 446
Thorhild	90 280
Tofield	137 612
Trochu	115 400
Turner Valley	78 122
Valleyview	223 560
Vauxhaul	131 080
Vermilion	273 021
Wainwright	403 160
Warner	75 775
White Sands	14 022
	$ 11 817 691

Occupational Health and Safety

The Occupational Health and Safety Section is responsible for the development and management of the department's programs for occupational health and safety, vehicle/equipment safety and construction zone safety.

To discharge these responsibilities and achieve uniform and consistent safety standards throughout the department, the section provides direction to six regional safety officers who are responsible for co-ordinating and implementing the health and safety programs within each region.

The management and co-ordination of health and safety programs for other areas of the department is handled directly out of section headquarters. The section liaises with other government departments, boards and agencies and deals extensively with the construction industry.

The department continued its active involvement in the Alberta Government Occupational Health and Safety Program. A senior department official serves as a member of the joint Government/AUPE Occupational Health and Safety Committee. Twenty-five departmental joint worksite health and safety committees comprised of employee and management representatives continued to meet regularly during the reporting period to review accidents, deal with health and safety concerns and make recommendations on corrective action.

During the reporting period, the section continued to provide services and assistance to managers, supervisors and workers in meeting their health and safety responsibilities in many areas some of which include:

- health and safety awareness
- chemical safety data sheets
- transportation of dangerous goods
- health and safety hazard surveys and monitoring
- accident reporting and investigation
- general operation procedures
- product evaluation
- traffic accommodation standards and procedures
- construction safety campaign
- vehicle operator counselling
- health screening and medical surveillance
- statistical data.

A combination of formal health and safety training courses and on-the-job training continued to play a key role in the department's overall accident and loss prevention efforts. A summary of formal courses and the number of participants follows:

First Aid	419
Defensive Driving	403
Professional Driver Improvement	157
Supervisor's Accident Prevention	30
Joint Worksite Health and Safety Member Training	54
	1063

New projects undertaken and in progress are:

- Occupational Hygiene Survey for Grader Operators
- co-ordination of a department Smoking Policy
- Occupational Health and Safety Program Evaluation at the worksite level
- implementation of transportation of Dangerous Goods
- legislation requirements.

Following is a breakdown on the Workers' Compensation Board Claims administered on behalf of the department for the fiscal year ended March 31, 1986:

Fatalities	1
Lost time injuries	227
Medical aid injuries	162
Hearing loss	8
Dermatitis	1
Respiratory	1
Personal appliance (eye glasses)	24
Claims under adjudication	7
	431

Operations Branch

During the period from April 1, 1985 to March 31, 1986 the Operations Branch was responsible for co-ordinating and monitoring the following programs:

- maintenance of primary highways
- construction and maintenance of campsites and rest areas
- maintenance and operation of ferries
- administration and operation of seven construction camps.

Operations Branch's mandate includes developing and monitoring standards of primary highway maintenance; the equitable distribution of maintenance allocations throughout the province; overall responsibility for planning of programs involving rest areas, campgrounds, ferry system and department maintenance yards; plus supervision and direction of seven construction crews. The branch was also responsible for truck registry, dispatching and monitoring all trucking requirements for the successful completion of the Winter Gravel Stockpiling Program.

Maintenance of Primary Highways

This marked the second year in the initiative to privatize a number of maintenance functions. These include campground maintenance, snowplowing local roads, guardrail and sign installations, mowing of highway rights-of-way and seeding of highway rights-of-way. These initiatives have been in the main successful, although some problems have been encountered with the standard of performance particularly with the highway mowing work.

Maintenance of primary highways accounted for expenditures of $67 149 855. The types of roads maintained in two-lane equivalent kilometres are:

	GRAVELLED	OILED	PAVED
Primary Highways	1 289.51	681.10	12 518.05
Approach Roads	15.03	3.76	293.64
	1 304.54	684.86	12 811.69

Erosion Control Program

During the 1985/86 construction season, a total of 176 erosion control projects were completed. Eight thousand two hundred and twenty-three hectares (20 311 acres) of rights-of-way, borrow areas and gravel pits were seeded to grass and fertilized along primary highways, secondary roads, resource roads, improvement district roads, airports and in Kananaskis Country. The total expenditure amounted to $1 759 800.

4-H Clean-up Program

During the 1985/86 4-H Clean-up Campaign, a total of 8337 children representing 520 clubs participated in the clean-up of Alberta's primary highway rights-of-way. A total of 7800.25 kilometres were cleaned with 57 272 bags of litter being collected. The clubs earned a total of $138 391. The expenditure for this program was approximately $257 340.

Signing

Major signing was undertaken on all construction projects involving the installation of approximately 10 000 signs. In addition to this, 350 signs with break-away bases were installed on existing and new projects. Along with this, six overhead sign structures were installed on multilane highways. The installation of traffic signals and crosswalk signals was completed at 17 locations.

Guardrail Program

The raising of substandard guardrail to appropriate heights and the installation of guardrail on new projects totalled 150 000 metres.

Approximately 7800 road edge delineators were installed in combination with this work.

Skid Resistance Program

The department's two camps applied skid resistance surfacing to 691.59 kilometres of paved surface on the province's primary highway system.

Additionally, 33.36 kilometres of paved roadway on the secondary road system, 5 kilometres on the park roads system and 0.79 kilometres on the approach road system had skid resistance surfacing applied. A high float emulsion skid resistance surface was applied to 89.77 kilometres of secondary roads and 75.26 kilometres on the province's primary highway system.

The department also contracted 69.61 kilometres of skid resistance surface treatment to the private sector for a total of $766 814.

The sum of $1 285 328 was expended during the fiscal year on the crushing of suitable rock chip material. Total costs for washing of the crushed chips amounted to $411 931.

The entire skid resistance treatment program was completed on schedule and within budget allocations.

Maintenance and Operation of Ferries

Operations Branch was responsible for allocating funds for the operation and maintenance of eight ferries throughout the province. In addition, Alberta Transportation shared with the Province of Saskatchewan, on a 50-50 basis, the cost of operating and maintaining the Meridian Ferry located north of Lloydminster. A new bridge is under construction at the Meridian Ferry Crossing and should be completed in 1987. These ferries provide essential transportation services to the travelling public by linking certain low volume routes over major rivers.

A new and larger timber scow was constructed for the Rosevear Ferry Crossing to replace the existing scow in order to more efficiently accommodate local traffic and handle large farm implements. New concrete approach aprons were provided at the Crowfoot Ferry Crossing.

The total expenditure for the operating, maintaining and upgrading of ferries was $1 119 919.

Construction of Campsites and Rest Areas

During the 1985/86 construction season, a total of $301 000 was allotted for the upgrading of Alberta Transportation's campgrounds. Upgrading included improved water supply, improved access, improved waste handling facilities, site expansion and new campground amenities. Grants totalling $118 000 were provided to the Towns of Beaverlodge, Sexsmith and Valleyview to improve their campground facilities. During 1985/86 Alberta Transportation transferred the Red Deer Lake campground to the County of Ponoka and closed the Bassano, Crossfield and Sheep Creek campgrounds, which leaves the department with 104 campgrounds and day use areas. During 1985/86 Alberta Transportation's campgrounds and day use areas were inspected, inventoried and photographed by two people employed under the STEP Program.

A contract was awarded for the construction of the Valleyview rest area. Major portions of the work were completed in 1985/86 fiscal year with a minor carryover into the subsequent fiscal year. Land was purchased in the Bassano area for a new facility.

Expenditures for the construction of campgrounds and rest areas were $998 790.

MAINTENANCE OF PRIMARY HIGHWAYS

1985/86 Fiscal Year Expenditures

DISTRICT	EXPENDITURE
1	$ 2 678 241
2	4 439 577
3	3 005 363
4	8 612 400
5	3 647 023
6	6 397 549
7	6 448 353
8	4 381 499
9	4 112 220
10	4 137 079
11	4 524 364
12	4 076 046
13	4 214 072
14	2 900 976
15	2 939 687
HEAD OFFICE	
4-H Clean-up	218 226
Welcome Signing	94 242
Equipment Operators' Training	71 915
Laboratory Testing	286
Inventory	11 562
Traffic Signing Investigation	4 829
General	234 348
	$ 67 149 857

OPERATION & MAINTENANCE OF FERRIES

Expenditures for 1985/86 Fiscal Year

FERRY	LOCATION	EXPENDITURE
Berrymoor	North Saskatchewan River	$ 5 878
Bleriot	Red Deer River	72 472
Crowfoot	Bow River	126 000
Finnegan	Red Deer River	71 321
Finnegan	Red Deer River	20 863
Klondyke	Athabasca River	75 388
La Crete	Peace River	220 917
Meridian	Lloydminster (50% cost share)	50 271
Rosevear	McLeod River	95 442
Rosevear	McLeod River	180 651
Shaftesbury	Peace River	200 715
		$ 1 119 918

CONSTRUCTION OF CAMPSITE & REST AREAS

Expenditures for 1985/86 Fiscal Year

DISTRICT	
1	$ 57 360
2	30 823
3	9 488
4	86 634
5	—
6	32 171
7	32 790
8	3 476
9	14 074
10	25 017
11	100 046
12	9 819
13	592 148
14	—
15	4 945
	$ 998 791

Aviation Branch

Aviation is responsible for the preparation and administration of the Provincial Airport Development Program.

During the year meetings were held with local officials in many communities to provide information on the Provincial Airport Development Program and give advice and assistance regarding operations.

Liaison was continued with aviation related industries and organizations. Aviation was represented on organizations such as the Alberta Aviation Council, the Air Transport Association of Canada, the Canadian Aeronautics and Space Institute and the International Northwest Aviation Council.

Background information, technical advice and position papers for senior management were provided on a wide variety of aviation subjects, as part of departmental initiatives, or in response to federal activities in both the operational and policy areas of air transportation.

During the summer of 1985, official opening ceremonies were held for airports and new terminal buildings at Elk Point, Foremost, Spirit River, Sundre and Valleyview.

Expenditures of the headquarters component amounted to $318 483 which covered the planning, programming and administration of aviation activities.

Included in this total were grants of $111 760 to the Alberta Aviation Council and its subsidiary sector, the Civil Air Rescue Emergency Services (CARES). The CARES system provides training to flying personnel in the specialized task of airborne searching, and the organizational structure to mount searches for missing aircraft or other emergency situations.

Airport Operations and Maintenance

Aviation is responsible for monitoring the operation and maintenance of 16 provincial airports and 63 forestry airstrips.

It provides support and develops standards and guidelines for maintenance and all operations, and also has responsibility for the civilian Medley Air Terminal at Canadian Forces Base Cold Lake, and for non-directional radio beacons on community airports at St. Paul, High Prairie, and Fairview.

Expenditures on operations and maintenance activities during the reporting period totalled $2 384 697.

AIRPORT OPERATIONS AND MAINTENANCE

Expenditures for the Year Ended March 31, 1986

Cooking Lake	$ 106 939
Edson	116 072
Fort Chipewyan	183 265
Fort Vermilion	12 823
Grande Cache	99 583
High Level	200 934
Jasper-Hinton	116 586
Lac La Biche	110 784
Lloydminster	162 578
Manning	124 020
Pincher Creek	122 781
Rocky Mountain House	100 745
Slave Lake	149 983
Swan Hills	141 959
Wabasca	34 019
Whitecourt	132 299
Forestry Airstrips	49 851
Medley Air Terminal	128 923
Navigation Aids	49 851
HEAD OFFICE	58 748
	$ 2 202 743

15
HIGH LEVEL
11
6
14
PEACE RIVER
12
4
GRANDE PRAIRIE
HIGH PRAIRIE
13
LAC LA BICHE
ATHABASCA
9
BARRHEAD
ST. PAUL
5
EDSON
7
EDMONTON
VERMILION
8
10
3
6
5
RED DEER
STETTLER
2
HANNA
AIRDRIE
3
4
CALGARY
Alberta
TRANSPORTATION
MEDICINE HAT
2
1
1
LETHBRIDGE
TRANSPORTATION REGIONS 1985
REGIONAL BOUNDARY
REGIONAL OFFICE
DISTRICT BOUNDARY
DISTRICT OFFICE

Regional Reports

Region 1 (Southern)

Most of the projects programmed for the 1985/86 fiscal year were completed, however a wet fall, early snowfall and a late start on some projects necessitated that several projects be carried over into the following season.

Total expenditures in Region 1 for 1985/86 were approximately $66 million.

Maintenance activities went smoothly during both the summer and winter seasons. All major activities were completed in a timely manner and as planned. Highway right-of-way mowing and campsite maintenance were again tendered to the private sector, with encouraging results. A new dimension to maintenance operations was added when District 2 became significantly involved in grasshopper control.

Under various bridge programs a number of structures were constructed in the region. These included the completion of two major irrigation bridges over Eastern Irrigation District canals on the twinning of Highway 1, east of Bassano. Major structures completed on local and secondary roads included the crossing of the Little Bow River east of Stavely and the commencement of construction on the Oldman River bridge, west of Lethbridge, the Belly River bridge south of Hillspring, and the Crowsnest River bridge at Hillcrest. In combination with Alberta Environment, local municipalities and irrigation districts, a number of irrigation bridges were rehabilitated or replaced as part of an ongoing irrigation bridge improvement program.

Other major construction highlights in the region were:

- A major twinning project comprising 14 kilometres was completed from west of Redcliff to Medicine Hat on Highway 1. A significant start was made on another twinning project at Bassano also on the Trans-Canada Highway.
- Two projects were completed on Highway 36, a base course project north of Highway 1, and a large final paving project in the Etzikom Coulee area.
- Grade widening and paving was completed on Highway 23 between Nobleford and Barons. A second project was started between Barons and Carmangay as part of a continuing program to upgrade Highway 23 between Monarch and Champion.
- Work continued on Highway 2 from Cardston to north of Stand Off as part of ongoing work to upgrade Highway 2 from Cardston to Fort Macleod.
- A major grading project on Highway 22 in the Burton Creek area was initiated as part of the program to upgrade Highway 22 from Highway 3 to Longview.
- The grading project on SR 509 from north of Stand Off to Highway 3 was continued. A base course contract was also initiated on this important link.
- Secondary Road 527 was regraded between Highway 2 and Willow Creek Provincial Park.
- Two base course projects were completed on SR 550 between Duchess and Bassano.
- The City of Lethbridge completed the majority of the work on the Crowsnest Trail through the city and opened the facility to traffic early in the winter.

A number of other grading and base course projects were undertaken on secondary roads, some of which were completed and others were carried over into the next season.

Under the Community Airport Program upgrading and paving was completed at the Brooks and Bassano Airports. A pavement overlay was completed on the main runway at the Claresholm Airport. Aircraft Radio Control of Aerodrome Lighting systems were also installed at four community airports in the region.

Close liaison was maintained with all rural and urban municipalities in the region in an effort to meet the transportation needs of these communities.

Region 2 (South Central)

Average to dry weather conditions experienced during the 1985 summer construction season enabled the construction programs to progress satisfactorily throughout the region. Some of the major projects involved continuing work on the twinning of the Trans-Canada Highway. At the close of the 1985 construction season, the twinning program in Region 2 extended from Calgary to east of Gleichen. The project that will complete the twinning to the regional boundary east of Cluny was commenced in the 1985/86 season.

Total expenditure in Region 2 during the 1985/86 fiscal year was approximately $82 million.

The following were some of the major construction highlights in the region:

- The construction of base course on Highway 56, from Highway 1 to Hussar, has provided a surfaced highway link on Highway 56 from the Trans-Canada Highway to Drumheller.
- Reconstruction of Highway 21 was continued with a project from Trochu north.
- Grading of Highway 27 through the Red Deer River Valley, near Munson, was undertaken, and largely completed in 1985.
- Sundre community airport was completed during the 1985 construction season.
- Construction of a truck arrestor bed on the southbound lane of Highway 9, approaching Drumheller, was commenced and is expected to be completed in 1986.

- Base course and surfacing projects continued on Highway 41 south of Acadia Valley, SR 555 in the Buffalo area and Highway 36 near Sullivan Lake.
- The completion of paving of SR 541, along with completion of the other road projects involved in the 1985 Kananaskis Country recreation development program.
- Construction of the Acme overpass on Highway 2 north of Crossfield and the modifications to the Highway 2 interchange at Highway 22X, have been completed.
- Bridge projects in the region include a crossing of Highway 9 over Crossfield Creek, near Irricana, SR 840 over the Rosebud River at Rosebud, a local road crossing Kneehill Creek, near Linden, and commencement on construction of Highway 2 over the Sheep River, north of Aldersyde.
- Centreline and shoulder stripes were completed over 2500 kilometres of highway.
- Purchase of right-of-way has proceeded on eight major projects and numerous smaller projects within the region.

The 1985/86 construction season was a productive year with staff participation in numerous courses and safety training seminars.

Region 3 (Central)

Expenditures for construction and maintenance in the Central Region totalled more than $83 million. Construction was slowed in late summer and coupled with an early winter, many projects were left incomplete and carried over to 1986.

Highlights of the major construction projects in the region were:

- The Blackfalds Interchange on Highway 2 and the CP mainline underpass on the SR 597 connection to Highway 2A were opened to traffic.
- Highway 11X from Red Deer to Sylvan Lake and the Highway 20 connection to north of Highway 11 were completed to the base course stage.
- Highway 2A from Hobbema to Wetaskiwin was overlaid.
- Highway 22 from Rocky Mountain House to 16 kilometres north was paved.
- Highway 22 from 16 kilometres north of Rocky Mountain House to junction Highway 53 was graded.
- Highway 22 from east of Alder Flats to Highway 53 was base coursed.
- Highway 36 from south of the Battle River to Castor was completed to the base course stage.
- Highway 41 from Czar south 14.4 kilometres was paved.
- Highway 42 from Penhold to west of Pine Lake was overlaid.
- Highway 53 from west of Rimbey to west of the Medicine River was base coursed.
- Highway 54 from Innisfail to the Red Deer River was provided with climbing lanes and intersection improvements with a pavement overlay.
- Highway 56 from north of Meeting Creek to junction Highway 53 was base coursed.

Grading projects were completed on secondary roads at the following locations through the region:

- Secondary Road 600 in the Town of Provost
- Secondary Road 602, east of Alliance to SR 872
- Secondary Road 611, Usona to SR 792
- Secondary Road 616, west of Highway 2 to SR 795
- Secondary Road 617, Round Hill west
- Secondary Road 884, Veteran north.

Four base course projects were undertaken on secondary roads during the construction season. These included:

- Secondary Road 600 in the Town of Provost
- Secondary Road 601 from Alix to Highway 21
- Secondary Road 881, north of Hardisty
- Secondary Road 899, Provost north.

A total of six paving projects were completed on secondary roads during the construction season. Paving was completed on:

- Secondary Road 590 from Big Valley to Highway 56 and through the Red Deer River Valley
- Secondary Road 600, through the Town of Provost
- Secondary Road 822, east of Hobbema
- Secondary Road 616 from Mulhurst to SR 795
- Secondary Road 780 was paved from Highway 13 to Mulhurst
- Secondary Road 781 from Sylvan Lake to Highway 54.

Five grading projects were undertaken under the Resource Roads Program during the 1985/86 construction season.

There was approximately 185 kilometres of primary highways and secondary roads paved, including 70 kilometres that were overlaid under the Pavement Rehabilitation Program.
Two hundred and twenty-five kilometres were completed to a base course stage. One hundred and thirty-two kilometres of primary highways, secondary roads and resource roads were graded or regraded.

The Forestburg airstrip was completed, a runway at the Red Deer Airport was paved and grass landing strips were constructed at Basharw and Rimbey. Assistance with street improvements was provided to Big Valley, Birchcliff, Castor, Czar, Daysland, Edberg, Half Moon Bay, Killam, Millet, New Norway, Norglenwold, Provost, Rimbey, Rocky Mountain House, Sedgewick and White Sands.

Grants were provided to the respective counties for street improvements in the Hamlets of Round Hill, Ohaton, Kingman, Meeting Creek, Alder Flats, Winfield, Westerose and Mulhurst.

Regional staff met with the rural municipalities and a number of urban communities throughout the year to review and resolve local transportation issues.

Region 4 (North East)

In 1985/86 construction and maintenance expenditure in the North East Region totalled approximately $98 million.

Some highlights of construction were:

- Completion of grading of Highway 17 from Dillberry Lake to junction of SR 610
- Completion of paving of Highway 36 from north of Viking to the junction of Highway 16
- Completion of grading and base course on Highway 41 from north of Vermilion to junction of SR 631
- Base course on Highway 45 from west of Dewberry to north of Marwayne
- Completion of grading of Highway 45 from the junction of Highway 41 to west of Dewberry
- Completion of base course on Highway 45 from north of Marwayne to the Saskatchewan boundary
- Completion of grading, base course and paving of Highway 16 from east of SR 834 to junction of Highway 15
- Completion of grading, base course and paving on Highway 16 from west of Innisfree to east of Mannville
- Completion of grading, base course and paving of Highway 16 from west of Blackfoot to Lloydminster
- Grading, base course and paving of Highway 16 from west of Kitscoty to west of Blackfoot
- Commencement of base course on Highway 36 from east of Kikino to north of the junction of Highway 55
- Grading on Highway 36 from junction of Highway 28 to west of Goodfish Lake
- Paving of Highway 36 from north of junction Highway 55 to Lac La Biche
- Completion of grading, base course and paving of Highway 41 from south of the North Saskatchewan River to south of Elk Point
- Completion of grading on Highway 55 from the junction of Highway 36 east of junction of SR 866
- Grading of Highway 55 from east of junction of SR 867 to west of the junction of SR 881
- Grading on SR 631 from east of the junction of SR 857 to the junction of Highway 36
- Grading on SR 637 from the junction of SR 855 to the junction of SR 857
- Completion of grading on SR 637 from the junction of SR 831 to east of Lamont
- Base course on SR 834 from the junction of SR 617 to the junction of Highway 14
- Completion of base course on SR 855 from the county boundary to the junction of Highway 16
- Paving of SR 881 from south of the junction of Highway 14 at Irma to south of the junction of SR 619
- Completion of grading on SR 893 from north of Vermilion River to the junction of Highway 45
- Base course on SR 646 from the junction of SR 893 to east of Lindburgh
- Paving on SR 659 from the junction of SR 892 to Bonnyville
- Grading on SR 866 from south of Beaver River to junction of Highway 55
- Grading on SR 855 from Beaver River Metis Settlement to the junction of SR 663
- Paving on SR 881 from the junction of Highway 28A to north of Therien
- Base course on SR 893 from junction of SR 640 to junction of SR 646
- Paving on SR 637 from the junction of SR 860 to the junction of Highway 36
- Paving of SR 899 from Municipal District boundary north of junction of SR 610
- Completion of grading on SR 881 from Conklin to south of Christina River
- Grading on SR 881 from north of Kettle River to south of Cheecham
- Grading on SR 897 from north of SR 641 to the south boundary of Frog Lake Indian Reserve
- Completion of paving overlay contract on Highway 14 from Bruce to east of Viking
- Pavement overlay on Highway 28 from the White Earth Creek to Vilna.

Grading was completed on 67 kilometres of roadway and 590 kilometres were gravelled under the Improvement District programs.

The following summarizes projects undertaken under the Primary Highway, Secondary Road, Resource Road Improvement, Twinning and Pavement Rehabilitation Programs:

- Forty-eight grading projects for approximately 386 kilometres of construction
- Eleven base course projects for approximately 190 kilometres
- Twelve paving projects for approximately 160 kilometres
- Seven combined grading, base course and paving projects for approximately 87 kilometres.

A Winter Works Program of gravel stockpiling and crushing for major projects scheduled for construction in 1986/87 was undertaken. As well, clearing of right-of-way and improvement of sight lines at rural road intersections was undertaken.

Region 5 (North West)

The 1985/86 program in the North West Region had a total expenditure of approximately $146 million for capital construction and maintenance. A portion of the capital expenditure was a result of projects being carried over from the previous year because of unseasonal weather during the fall of 1984.

Unfortunately, similar weather conditions were experienced in September and October of 1985 resulting in some major projects not being completed. However, a substantial portion of the major highway construction program was completed during the year together with many significant developments on the secondary system.

The following were some of the highlights.

- Privatization continued to play a key role in the development of programs both in maintenance and construction. Virtually all primary highway mowing and the maintenance of Transportation campgrounds is now handled by the private sector. Only the most remote locations are still handled by Alberta Transportation forces. In addition, an increasing amount of work associated with highway construction is being handled by engineering consultants from the preliminary survey stage through to project management.

- A major Winter Works Program was undertaken for an expenditure of $16 million. Over 2.4 million tonnes of gravel were stockpiled and 30 kilometres of winter road were roughed in.
- A major program was implemented to clear sight lines at local road intersections, particularly on school bus routes. The work was carried out in municipal district, county, or improvement district and in total 1848 quadrants comprising 1463 acres were cleared. In addition, during the Winter Works Programs 1787 acres of right-of-way were cleared. For the total Winter Works Program this region employed an additional 525 wage personnel and equipment on the various phases of the program.
- The Town of Edson hosted the Alberta Winter Games and this department assisted in upgrading and maintaining the access roads to some of the venues.

Major construction projects in the region were as follows:

- Two major twinning projects were undertaken on Highway 2 from St. Albert north to Morinville with anticipated completion in 1986.
- Further major thrusts were made on the Yellowhead Highway with work being undertaken at a number of locations. Highway 16X was completed from the City of Edmonton to the Lake Eden Interchange and opened to traffic. This significant project has relieved Highway 16 of traffic congestion and provided an alternate route to and through Edmonton. The section west of Edson to the junction of Highway 47 was opened to traffic; and while work continued on the complex project through the Town of Hinton, poor weather conditions resulted in substantial delays.
- Highway 21 south of Fort Saskatchewan was twinned and opened to traffic.
- The continuation of construction of Highway 40 between Grande Cache and Grande Prairie took place at a number of locations and despite construction difficulties and unseasonable weather this major connector is still on schedule with only one contract remaining in this region.
- Rehabilitation of Highway 2 and 14 was undertaken on those sections adjacent to Edmonton in keeping with the department's policy of maintaining the existing system in good condition.
- Work at both the Calling Lake and Cooking Lake Airports was completed and both will be open to traffic in the near future.
- A number of secondary road upgrading projects were undertaken in the various municipalities and improvement districts. Of significance was the application of base course to SR 918 between Barrhead and Greencourt, leaves one section at the Greencourt end to complete the surfaces of this important east-west connector. A major secondary road twinning project was commenced in the County of Strathcona on SR 630 from Sherwood Park east to serve the large volumes of commuter traffic between the Sherwood Park area and Edmonton.

Region 6 (Peace)

The 1985/86 season in the Peace Region was extremely busy. The start of the fiscal year saw the climax of a Winter Works Program. Summer construction and maintenance progressed well until the onset of inclement weather in early September. A moderate winter was accompanied by considerable "freeze-thaw" cycles, which resulted in a costly winter maintenance program. The total expenditure for all construction and maintenance activities in this region was approximately $157 million.

Some of the significant projects undertaken were:

- Final paving was completed on Highway 58 from west of High Level to the junction of Highway 35.
- Granular base course was completed between Sousa Creek and the Chinchaga River on Highway 58.
- The completion of base course from south of Moosehorn River to south of Adams Creek completes Highway 33 to a surfaced stage from Kinuso to Swan Hills.
- Good progress was made on the five grading contracts currently under way on Highway 40. Two contracts remain to be called in the region and completed in 1986.
- Cement stabilized base course was completed from Sexsmith to Valhalla Centre on Highway 59.
- Construction continued on several sections of SR 734 between Muskeg Corner and Highway 34.
- Highway 35 was repaved from north of the 27th baseline to south of Melito Creek.
- Continuation of regrading from junction SR 750 north towards Red Earth for some 23 kilometres on Highway 67.
- Secondary Road 744 from Jean Cote to Marie Reine was contracted to base course and is a 1986 carryover.
- A late start was made on the extension of the Canadian National Railway overpass on Highway 2 on the west hill at Peace River.
- Secondary Road 697 was regraded from Blues Creek to west of Steephill Creek. A connector road was completed from the east La Crete area to Highway 67 north of Tall Cree reducing the travel distance to Red Earth, Slave Lake and Edmonton.

Under the Winter Works Program a total of 3 012 010 tonnes of gravel were hauled to stockpiles and 1 108 188 tonnes of gravel were crushed for future construction and maintenance projects. Clearing of rights-of-way amounted to 5199 acres and in addition 627 intersection quadrants were cleared to improve sight line totalling another 718 acres. Work was provided for 887 additional wage staff and for 364 pieces of heavy equipment. The total expenditure under this program for the Peace Region exceeded $25 600 000.

Regional and district personnel continue to liaise with elected officials and councils to maintain a good working relationship concerning all transportation issues.

REGIONAL ADMINISTRATION

1985/86 Fiscal Year Expenditure

REGION		
1	Regional Office	$ 724 656
	District 1	391 438
	District 2	439 028
2	Regional Office	1 098 837
	District 3	337 223
	District 4	560 738
3	Regional Office	829 620
	District 5	313 683
	District 6	492 730
4	Regional Office	732 381
	District 10	512 777
	District 11	525 797
5	Regional Office	1 201 774
	District 7	641 056
	District 8	627 891
	District 9	486 590
6	Regional Office	558 088
	District 12	430 502
	District 13	585 558
	District 14	514 225
	District 15	342 557
HEAD OFFICE EDMONTON		
	Aviation	317 483
	RTS-H-O Safety Program	173 352
	Operations Administration	669 203
	Wage Payroll Default	14 458
	Miscellaneous	2 533
		$ 13 524 179

CONSTRUCTION PROGRAMMING

1985/86 Fiscal Year Expenditure

Director's Office	$ 231 349
Construction Programs	845 184
Program Development	487 922
Municipal Services	186 777
Aviation Programming	57 888
	$ 1 809 120

URBAN TRANSPORTATION AND PLANNING DIVISION

L.B. Root
Assistant Deputy Minister

Urban Transportation Branch 55

M.M. Duncan
Executive Director

Planning

K.E. Howery
Executive Director

Operational Planning Branch 51

R.J. Sawchuk
Director

Systems Planning Branch 54

G. Halls
Director

The *Urban Transportation and Planning Division* is responsible for providing financial assistance to major urban areas and for transportation planning assistance to both the department and municipal authorities throughout the province. The duties are carried out through three major branches: Urban Transportation, Systems Planning and Operational Planning.

Urban Transportation distributes funding assistance to the 16 Alberta cities and provides an engineering resource to these urban communities.

The Systems Planning Branch monitors provincial traffic volumes and provides detailed volume projections used to establish highway capacities and standards.

The Operational Planning Branch provides route location reports and functional design criteria required for detailed design work.

Operational Planning Branch

Location Services and Design and Environmental Services are the two main sections within this branch.

Location Services is involved in studying and developing new and upgrading existing primary highway and bridge alignments. Also assistance is provided in a similar capacity for secondary and local roads. In addition this section provides airphoto, mosaic and photogrammetric mapping services for the department and computer services for this branch.

Design and Environmental Services is mainly engaged in roadway system studies, larger urban and rural planning studies and in providing functional design of intersections, interchanges, four lanes and access control. The section also undertakes roadside landscape design including major rest areas, and carries out environmental assessment and monitoring during project planning, construction and maintenance.

Both of these sections undertake considerable liaison with other branches and divisions within the department, with other government departments, planning agencies, and the general public in reaching agreement on standards, alignments and specific design feature of a project.

The majority of work undertaken in these areas is provided to the department's Engineering and Regional Transportation Divisions for detailed design and project implementation.

The financial administration for Referral Services has been maintained by this branch.

Specific projects, quantities of work completed, and a financial report are outlined in the following under the respective section headings, including the Referral Services Section.

Location Services

Highlights of road corridor and alignment studies, location surveys and photogrammetric services completed in this section follow.

Location Studies

Studies were completed on 45 projects and another 141 projects were underway at the end of the reporting period. Some of the major projects completed were:

- Highway 16 east of Hinton to west of Obed
- Highway 21 junction Highway 53 - junction Highway 13
- Highway 22 Oldman River - south of Willow Creek
- Highway 40 south of McIntyre Mine - Sheep Creek
- Zama Lake Access
- O'Chiese Indian Reserve Access Road.

Location Surveys

Surveys were completed on 12 projects totalling 149 kilometres. These included:

- Highway 40 from Smoky River to McIntyre Mine
- Secondary Road 813 from south of Rock Island Lake to Sandy Lake
- Harold Creek Road from junction Highway 40 to Forest Reserve Boundary
- Zama Lake Access from north of junction Highway 58 to north of Hay Lake.

Survey staff from Regional Transportation assisted in several projects.

Photogrammetric Services

New contour mapping of 99 897 acres was produced on the interactive graphic system and an additional 5635 acres of existing imperial mapping was converted and digitized to produce metric format maps.

Details of work performed are:

- 45 047 aerial photography prints obtained
- 7096 kilometres of new photography obtained by contract
- 328 kilometres of orthophoto mosaics produced
- 15 964 kilometres of standard mosaics constructed
- 255 kilometres of photo control surveyed on 19 projects
- 105 622 acres of contour mapping completed.

Design and Environmental Services

Highlights of work completed in this section follow.

Preliminary designs and revisions were completed for 13 interchanges, 14 intersection improvements and 19 access control plans/reports. Thirteen projects involving utility integration, boundary rationalization, development and engineering review associated with the Edmonton and Calgary ring roads were completed. Twenty-nine other projects such as engineering reviews, cost estimates, traffic studies and analysis, minor geometric design research, and other miscellaneous projects were completed. Projects under study at end of period numbered 97.

Some of the major projects completed during the fiscal year include:

Functional Planning and Preliminary Design

- preliminary design for programmed interchanges at the junction of Highway 16 and 16X at the easterly and westerly side of Vegreville, and for a future interchange at the West Blairmore access to Highway 3.

- reviews and preliminary designs for intersection improvements at the junction of Highway 2A/54 at Innisfail, Highway 21/International Airport Road, Highway 25/SR 519, design revisions for the Highway 63/Suncor access; and a detailed preliminary design for the junction of Highway 43/SR 658 near Blue Ridge and the Highway 3 Blairmore Hospital access.
- preliminary design and access control reports for improving Highway 2 from Crossfield to Airdrie and Highway 2A from Crossfield to the junction of Highway 72; preliminary design and reports for multilaning Highway 15 from the junction of Highway 37 to Fort Saskatchewan and Highway 28 from the Edmonton city limits to the junction of Highway 37; and concept plans and reports for the multilaning of Highway 2 Nanton to Fort Macleod and Highway 3 from Fort Macleod to Monarch. Detailed functional planning work is being advanced on the multilaning of Highway 2 from Nanton to Stavely; improved access control for Highway 2 between Red Deer and Carstairs, multilaning of Highway 2A between Red Deer and Blackfalds and the multilaning of Highway 3 between Cranford and Taber.
- preliminary access control plans and revisions for the primary highway through the urban areas of Elk Point, Taber and Wildwood.
- review of consultant designs and reports for the Highway 1/1A Travel Information Centre at Canmore, Calgary Olympic site arterial road, Highway 2/43 Street Red Deer Rest Area proposal, the Wainwright Transportation Study, and the Highway 60 design through the Enoch Indian Reserve.
- continual liaison work for proposed leases and rationalization of the transportation and utility corridor including the integration of the adjacent land use, development and utility placements with the Calgary and Edmonton ring roads.
- continued liaison work with the City of Edmonton in reviewing and inputting to their design work and standards as prepared by their consultant for the Edmonton ring road.

Landscape Design

Landscape design plans, specifications and field assistance were completed for 10 projects and work is being advanced on another 13 projects. Major projects completed during the period include:

- site layout plans, building design integration, preliminary irrigation design, and final grading and landscaping plans for the Bassano Rest Area on Highway 1.
- site selection studies for proposed rest areas on Highway 2 in the High River area, Highway 16 in the Minburn area, and Highway 28 in the Vilna area.
- final landscaping design and field supervision for the Highway 43 Rest Area near Valleyview and the Highway 54 camp site near the Forest Reserve Boundary.

Environmental Design

Preparation of environmental mitigation plans, reviews of environmental plans, and other documents were completed for 11 projects. On site environmental co-ordination work was carried out on seven contracts on Highway 40 and three projects on SR 734. Ongoing review and input was provided to the Fish Habitat Committee, the Fishways Working Group, the Bio-Engineering Research Project, and the Kananaskis Country Environmental Monitoring Committee. Work is being advanced for monitoring environmental concerns and mitigating measures for the 1986 construction contracts remaining on both Highway 40 and SR 734.

Design And Drafting Services

Design and drafting was completed for 17 location study reports, five concept/access control reports, and approximately 49 other preliminary design and landscape plans. Drafting on approximately 1150 kilometres of highway strip mosaics have been updated for branch and departmental use. Staff training is being advanced on the inter-graphics terminal and approximately 25 per cent of our design/drafting work is being done on the inter-graphics system.

Referral Services

The function of Referral Services is to provide technical information to the regional and district offices to assist them in the administration of the department's responsibilities concerning roadside development. Other branches and external government agencies are also provided with information and planning expertise as required.

Referral Services adminsters the department's approval of utility placements along the primary highway system under terms of the Public Highways Development Act, Pipeline Act and the Water, Gas, Electric and Telephone Companies Act. Utility companies and owners are advised of future highway improvements to minimize costly relocations of facilities. Standards for utility installations are developed and maintained to protect the highway plant and user.

OPERATIONAL PLANNING BRANCH

Expenditure For the Year Ended March 31, 1986

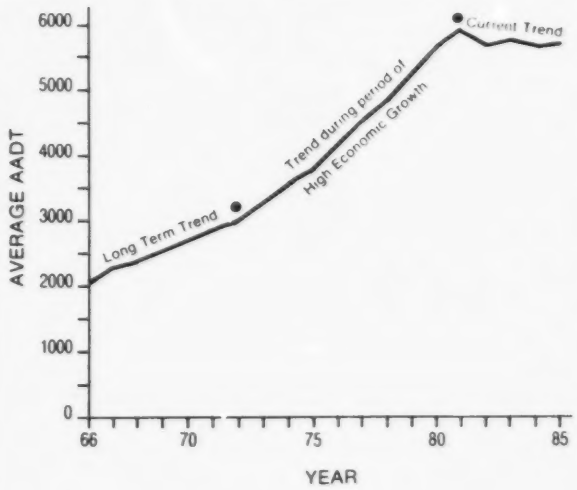
OPERATIONAL PLANNING ADMINISTRATION	
Administration Services	$ 427 000
General Office Services	100 242
	$ 527 688
DESIGN & ENVIRONMENTAL SERVICES	
Administration	$ 71 368
Functional Design	339 464
Drafting Services	571 582
	$ 982 414
LOCATION SERVICES	
Administration	$ 578 765
Location Studies	368 188
Photogrammetry Mapping	166 317
Photogrammetry Airphoto Services	457 749
Reconnaissance, Location & Control Surveys	737 568
	$ 2 308 605
REFERRAL SERVICES	
Administration	$ 84 383
Utility Permits & General Services	111 930
	$ 196 313
	$ 4 015 020

Systems Planning Branch

Systems Planning Branch provided comprehensive planning information and analytical services to each of the department's divisions in support of their activities. These services consisted of evaluating present transportation requirements and forecasting future needs on the basis of changing social and economic development in communities and regions across the province.

A continual program of monitoring traffic volumes and travel characteristics on provincial highways and secondary roads has shown a slight increase in overall provincial travel, specifically on primary highways. This occurrence is more appropriately observed within the context of historical traffic trends. It should be noted that although general travel on primary highways has increased by approximately one per cent from last year, the actual rate of growth or non-growth on each specific highway varies.

Traffic Trends on Provincial Highways



Approximately 20 special travel surveys were conducted in addition to the monitoring of traffic at 98 permanent counter sites and 444 portable counter sites across the province. The branch conducted 1126 manual counts and completed 113 traffic loop installations.

In support of the requirements to anticipate and identify changing travel patterns, a number of planning studies were undertaken including: Wolf Lake -Brazeau Development Activity Report, Emerson Trail, Impact of Oil Sands Development - Elk Point, Red Coat Trail, Improvement District 16 Market Road Study, Dickson Dam Area, Oldman River Dam Road Impacts, Impact of Changing Freight Rates Upon Grain Haul Patterns, Lomond - Lethbridge Corridor Study, the Oil Sands Projects Update: Cold Lake - Lac La Biche - Conklin, and For Macleod Traffic & Trade Trends. The major portion of planning studies involved the evaluation of municipal requests for changes to the secondary road and primary highway systems.

The program of technical and financial assistance to urban and rural municipalities developing transportation plans continued, with transportation planning studies being completed for five municipalities. These studies have proven valuable as a tool for community planners and municipal councils in determining the transportation implications of land use planning options.

Urban Transportation Branch

During the reporting period Urban Transportation was responsible for allocating more than $146 million to Alberta cities under the Urban Transportation Program. This program is designed to provide assistance to cities for capital and operating costs incurred in the development and operation of effective roadway and public transit systems. This was the first year of the three year program which became effective on April 1, 1985. Sixteen cities and the County of Strathcona (Sherwood Park) received urban transportation assistance in the 1985/86 fiscal year. The total grants provided to each jurisdiction were as follows.

Airdrie	$ 544 741
Calgary	51 514 694
Camrose	8 906 023
Drumheller	519 383
Edmonton	55 896 885
Fort McMurray	2 863 512
Fort Saskatchewan	400 000
Grande Prairie	6 344 721
Leduc	937 583
Lethbridge	3 304 846
Lloydminster	3 393 898
Medicine Hat	644 823
Red Deer	4 275 470
Spruce Grove	1 100 000
St. Albert	2 936 849
Wetaskiwin	567 866
County of Strathcona (Sherwood Park)	2 410 884
	$ 146 562 178
Multi-jurisdictional Projects	40 497
	$ 146 602 675

Details of grants made during 1985/86 for each of the four grant types available under the Urban Transportation Programs are outlined in the following sections.

Basic Capital Program

This program provides capital grants to support the development of roadway and public transit components of the city transportation system. The province pays 75 per cent of capital projects up to a maximum of $70 per capita to each city provided the city had sufficient projects. Some cities did not receive a Basic Capital allotment in 1985/86 because of the large carryover on hand.

BASIC CAPITAL PROGRAM

Airdrie	$ 430 000
Calgary	43 575 940
Camrose	892 570
Drumheller	466 970
Edmonton	39 205 950
Fort McMurray	2 474 640
Fort Saskatchewan	400 000
Leduc	872 970
Lethbridge	2 500 000
Lloydminster	645 820
Red Deer	3 574 900
Spruce Grove	1 100 000
St. Albert	2 487 030
Wetaskiwin	500 000
County of Strathcona (Sherwood Park)	2 083 480
	$ 101 210 270
Multi-jurisdictional Projects	40 497
	$ 101 250 767

Major Continuous Corridors and Primary Highway Connectors Program

As an incentive to ensure continuity of a high standard primary highway system through urban areas, the province will contribute 90 per cent of the cost of construction of one high standard, efficient route through each city which connects to the provincial highway system.

MAJOR CONTINUOUS CORRIDORS AND PRIMARY HIGHWAY CONNECTORS PROGRAM

Camrose (Camrose Drive)	$ 7 925 000
Edmonton (Clover Bar Bridge rehabilitation & Yellowhead Trail at 82 St. Interchange)	9 400 000
Grande Prairie (Highway 2)	6 000 000
Lloydminster (Highway 16)	2 675 000
	$ 26 000 000

Public Transit Operating Assistance Program

Municipalities with a provincially approved conventional public transit system received funding at $8 per capita plus $3 per capita for transportation of senior citizens and the disabled. All other municipalities received $3 per capita for transportation of senior citizens and the disabled.

Fort Saskatchewan and Spruce Grove were incorporated as cities during the 1985/86 fiscal year. They received $3 per capita for the transportation of the elderly and disabled under the Towns & Villages Public Transit Operating Program.

PUBLIC TRANSIT OPERATING ASSISTANCE PROGRAM

Airdrie	$ 114 741
Calgary	6 817 954
Camrose	38 253
Drumheller	20 013
Edmonton	6 160 935
Fort McMurray	388 872
Grande Prairie	268 521
Leduc	37 413
Lethbridge	644 446
Lloydminster	27 678
Medicine Hat	456 423
Red Deer	561 770
St. Albert	390 819
Wetaskiwin	30 066
County of Strathcona (Sherwood Park)	327 404
	$ 16 285 308

Primary Highway Maintenance Program

These grants are provided to assist in the maintenance of primary provincial highway routes within the cities. During the reporting period the provincial contribution was $2000 per lane-kilometre of eligible roadway.

PRIMARY HIGHWAY MAINTENANCE PROGRAM

Calgary	$ 1 120 800
Camrose	50 200
Drumheller	32 400
Edmonton	1 130 000
Grande Prairie	76 200
Leduc	27 200
Lethbridge	160 400
Lloydminster	55 400
Medicine Hat	188 400
Red Deer	138 800
St. Albert	59 000
Wetaskiwin	37 800
	$ 3 066 600

ALBERTA MOTOR TRANSPORT BOARD

C. Procuik
Chairman

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The *Alberta Motor Transport Board* is a body corporate, as constituted under the Alberta Motor Transport Act. As a quasi-judicial tribunal, the Board deals with intra and extra-provincial motor carrier and bus matters. When dealing with extra-provincial matters, the Board takes a delegated authority to act as a federal Board, from the Motor Vehicle Transport Act (Canada).

Since the last Annual Report, the Board structure has changed, with the Chairman and Vice-Chairman as the only full time Board Members. The other seven Board Members are part time members, drawn from both the private sector and public service.

The Board, as of March 31, 1986, consisted of the following members:

C. Procuik, Chairman and Member
G.I. Bellingham, CITT, Vice-Chairman and Member
R.M. West, Member
A.C. Smythe, Member
L. Hollinger, Member
N.H. Clauson, Member
J. Banfield, Member
J. Channon, Member
J. Andrus, Member

Resulting from the Council of Transportation Ministers' February 1985 Memorandum of Understanding for the regulatory reform of the extra-provincial trucking industry, the Alberta Board has continued to provide leadership in the thrust toward uniformity of regulation across Canada for the trucking industry.

Alberta Motor Transport Board

Alberta, during the fiscal year 1985/86, continued to implement a number of reform initiatives and by streamlining its application process, is attempting to reduce the time and cost burden to motor carriers.

Alberta entered into an arrangement with the Provinces of Manitoba and Saskatchewan, which allows each province's carriers to transport some 30 commodities between the three jurisdictions on an Ease-of-Entry basis. This program will prove to be very beneficial to the shipping and carrier community, as it will allow many carriers to provide service in this very competitive market.

At the direction of the Council of Transportation Ministers, the Chairmen of the Board is, through the Canadian Council of Motor Transport Administrators (CCMTA), developing a uniform National Safety Code (NSC) for commercial vehicles. The NSC when approved by all jurisdictions will be a key element in the regulatory reform process. This will mean the only entry criteria for a new carrier coming into the market will be "fitness/safety/insurance."

Alberta continues to work with state governments in the U.S.A., and through External Affairs Canada, with the U.S. federal government, to ensure that Alberta's motor carriers receive easy and equitable access to the very important United States market place.

EXTRA-PROVINCIAL OPERATING AUTHORITIES, 1985/86

	APPROVED	DECLINED	TABLED	WITHDRAWN	CANCELLED
New Applications					
Motor Carrier	259	12	45	—	—
Bus	8	2	—	1	—
Amendments					
Motor Carrier	347	7	55	—	—
Bus	—	1	—	1	—
Transfers					
Motor Carrier	66	2	1	—	—
Bus	3	—	—	—	—
Cancellations					
* Motor Carrier	45	—	—	—	—
Bus	—	—	—	—	—
Temporary Authorities					
Motor Carrier	977	8	4	—	—
Bus	—	—	—	—	—
Reinstatements					
Bus	—	—	—	—	—

* *Cancelled for non-payment of prorate fees, no insurance, no longer needed, dormant authority*

OPERATING AUTHORITY CERTIFICATES 1985/86

Intra-Provincial Operating Authority (Bus)	
Class A Charter Service	21
Class B Charter Service	42
Class C Charter Service	51
• Class D Charter Service	15
Intra-Provincial Bus Route Certificates	141

• *Class D Charter classification (charter bus operations that are publicly funded in whole or in part) was established, as the result of government initiative on January 6, 1984 to deregulate the Alberta intra-provincial charter bus industry.*

Seven increases in public bus tariffs were approved and five changes in schedules were approved.

PERMITS ISSUED, 1985/86

TYPE OF PERMIT	NO. ISSUED/APPROVED
Liveryman's Certificates	386
Drive-Yourself Certificates	230
Bus Single Trip Permits	1147
MTB 16 (Bus) Private Bus Permits	846
MTB 85 (Bus) Equipment Exemption Permits	25
• MTB 131	143

• MTB 131 is Class "D" Restricted carriers which was implemented as a result of the deregulation of the bussing industry initiated in January 1984.

ALBERTA MOTOR TRANSPORT BRANCH

H.K. Walker
Executive Director

The *Motor Transport Branch*, under the direction of the Executive Director and with reporting responsibilities to the Deputy Minister of Alberta Transportation, provides operational and administrative support to the Motor Transport Board. Authority for branch operations, which is primarily that of administering public vehicle weights and dimensions on Alberta highways, is granted by Section 35(3) of the Motor Transport Act and is spelled out in the Delegation Order under that Act.

The operations of the branch and the policies, procedures and regulations employed are based on a philosophy of encouraging the development of the trucking industry. A policy of "enforcement without prosecution" is followed and the industry is encouraged to comply willingly rather than through punitive action.

To achieve its goal of maximum use of the highway system while ensuring highway plant protection and adequate safety considerations, the Motor Transport Branch is divided into five sections, each headed by a director: Transport Field Operations, Transport Engineering, Finance and Administration, Operating Authority Administration and Communications, Research and Training.

Motor Transport Branch

Transport Field Operations

Transport Field Operations (TFO) has eight regional offices and 19 vehicle inspection stations (VIS) located throughout the province.

As part of the Motor Transport Branch goal to "provide service to the transport industry" and its philosophy of "enforcement without prosecution," Transport Field Officers, within each region, in addition to routine duties of performing inspections and issuing permits, fulfill an important public relations function by:

- making regular visits and offering assistance to trucking firms
- attending industry and branch-initiated meetings and seminars on such matters as application and interpretation of regulations, policy and procedure, loading, and safety
- participating in such events as truck rodeos, recreation vehicle safety checks and industry safety meetings.

The efforts of Transport Field Officers throughout the province have created a well respected working relationship with the trucking industry.

Information about and documentation on suspected illegal carriers, submitted by transport officers at vehicle inspection stations and four special investigators, account for the majority of "Show Cause" hearings before the Motor Transport Board. Such action has a direct impact on and is appreciated by the legitimate carriers operating in Alberta.

During the fiscal year 1985/86, Transport Field Operations issued fee permits to a value of approximately $3.8 million.

Transport Engineering

Transport Engineering is responsible for developing regulations, policies and procedures for the use of transport equipment by the trucking industry that will maximize highway use, within reasonable safety limits, and minimize highway wear. In this connection, Transport Engineering continues to be involved with the Roads and Transportation Association of Canada (RTAC) Study in the development of equipment standards across Canada.

During the reporting period, Transport Engineering:

- initiated 31 general road ban orders to protect weakened roadbeds
- issued 14 172 fee permits, plus a total of 11 600 special and over-dimensional permits which can be issued only from the Red Deer Office because of their special nature (self-issuing permits, pipeline loop permits, and special equipment permits) were also issued
- through audit control, monitored all overload permits issued to maintain origin and destination control on all major equipment requiring such permits
- continued to computerize, for immediate access, the bridge evaluation program, designed to provide overload capacities on all bridges in Alberta.

The Engineering Branch continues to revamp and streamline regulations and policies in keeping with the move to regulatory reform and continues to provide advice to all segments of the transport industry on equipment standards and load distribution capabilities.

TRANSPORT FIELD OPERATIONS

Year Ending March 31, 1986

LOCATION	VEHICLES WEIGHED	VEHICLES CHECKED	INFRACTIONS	FEE PERMITS	NON-FEE PERMITS	HOURS OPEN	FEES PAYABLE
Acheson	53 736	4 896	684	6 747	2 051	5 387	$ 292 056
Ardrossan	45 283	4 920	370	787	632	3 128	23 999
Balzac	58 229	12 216	1 342	2 818	870	3 601	186 767
Burmis	32 323	14 527	1 282	1 990	817	5 189	46 434
Calgary (O)	—	—	—	3 118	2 276	2 037	88 486
Coutts	40 335	18 894	1 504	3 703	1 949	6 283	116 905
Demmitt	14 998	2 147	166	2 706	559	3 669	117 848
Dunmore	44 298	2 397	136	6 803	1 520	6 416	225 469
Edmonton (O)	—	—	—	19 885	3 430	3 421	938 971
Grande Prairie (O)	—	—	—	1 859	593	1 822	51 341
Grande Prairie VIS	21 651	1 367	396	3 043	1 059	2 686	141 268
Grimshaw	16 023	1 426	1 214	4 894	2 162	2 615	182 918
Hinton	25 737	2 440	94	2 594	1 036	4 623	69 327
Jumping Pound	63 996	15 956	816	5 365	1 334	7 753	162 082
Leduc	83 509	7 432	2 441	6 021	1 974	5 787	247 371
Lethbridge (O)	—	—	—	2 178	1 120	2 053	56 079
Morrin	11 463	2 340	147	1 189	243	1 704	33 665
Radway	36 937	4 549	1 035	4 341	1 330	6 250	174 102
Red Deer	3 091	656	3	5 112	481	1 347	150 750
St. Paul (O)	—	—	—	1 688	559	1 860	41 245
Strathmore	33 587	4 908	185	1 188	279	2 394	52 490
Vermilion	95 945	5 626	596	5 656	1 551	7 030	142 087
Whitecourt	60 995	4 989	819	5 621	1 053	5 276	253 796
	742 136	111 686	13 230	99 306	28 878	92 331	$ 3 795 456

(O): Office

Finance and Administration

The Finance and Administration Section delivers and maintains administrative support services and manages financial programs on behalf of the operating arms of the Motor Transport Branch and the Motor Transport Board.

Finance

During the reporting period, this section co-ordinated the preparation of and support for the annual operating budget for both the Motor Transport Branch and the Motor Transport Board. Support was provided to all operating sections to ensure maximum utilization of available funding.

In addition, all operating expenditures for all offices of the Motor Transport Branch and the Motor Transport Board are processed through the Red Deer Office.

Total revenues in excess of $8 million, were processed through the branch banking system and reported to Alberta Treasury during the fiscal year 1985/86. Cash management systems, controls and procedures were constantly monitored to ensure continued accurate reporting and reconciliation of this significant revenue which came primarily from three major sources.

- $658 044 which was generated from the cash sale of various fee permits at all field offices and vehicle inspection stations of the Motor Transport Branch
- $3 502 918 which was received from the sale of 76 932 fee permits under a permit charge account system which is used by some 800 major carriers to charge fee permits on a daily basis and pay for them upon receipt of a monthly invoice
- $3 884 747 which was collected by the Prorate Section of the branch from extra-provincial carriers that prorated their licence fees, based on miles travelled in jurisdictions that are members of one or more prorationing plans

Administration

General administrative support was provided on behalf of the Motor Transport Branch and the Motor Transport Board through continued development and delivery of programs in the areas of procurement, asset and inventory control, word processing services, and records management.

SALES JOURNAL - YEAR END 1985/86

DATE	MVD FEES	EXTENDED CDN	LICENCES AMER	OVER WEIGHT CDN	PERMITS AMER	BACK PLATES	GAIN ON FOREIGN EXCHANGE	TOTAL FEES	ON ACCOUNT EXTENDED LICENCES	ON ACCOUNT OVER WEIGHT	CREDIT ACCOUNT	TOTAL PERMIT FEES
April/85	$ 1 070	$ 39 339	$ 118	$ 12 305	$ –	$ 1 752	$ 399	$ 54 983	$ 1 617	$ 131 654	$ 365	$ 187 889
May/85	1 600	42 142	34	10 564	–	498	362	55 200	1 608	235 794	269	292 333
June/85	1 145	37 494	143	10 820	12	1 053	393	51 060	2 361	257 992	217	311 195
July/85	895	39 280	146	14 072	–	219	246	54 858	2 800	313 964	67	371 589
August/85	755	35 044	57	16 495	–	717	180	53 248	2 319	257 917	613	312 871
Sept/85	785	35 672	195	18 918	–	279	287	56 136	2 343	277 698	223	335 954
Oct/85	660	33 026	140	19 556	–	471	247	54 100	3 216	324 902	152	382 086
Nov/85	665	29 089	110	29 655	57	516	242	60 333	2 584	334 199	243	396 873
Dec/85	395	22 420	85	24 201	–	306	271	47 677	2 077	306 363	170	355 947
Jan/86	505	29 094	120	24 924	–	603	374	55 619	2 558	362 750	1 133	419 794
Feb/86	445	31 216	171	26 334	–	735	324	59 225	1 745	362 207	236	422 940
March/86	790	34 556	40	18 827	–	711	231	55 154	1 920	337 445	889	393 630
	$ 9 710	$ 408 371	$ 1 359	$ 226 671	$ 69	$ 7 860	$ 3 556	$ 657 593	$ 27 148	$ 3 502 919	$ 4 577	$ 4 183 081

Operating Authority Administration

Operating Authority Administration is responsible for the prorationing of licence fees and issuing intra-provincial operating authority certificates (truck) and documentation related thereto. This section is also responsible for issuing, upon Board direction, all extra-provincial truck and bus operating authority certificates.

Through this section, the province negotiates and maintains reciprocal licensing arrangements for commercial motor vehicles on an interprovincial and international basis. Alberta now participates in three commercial vehicle licensing reciprocity agreements in Canada and the United States. The three plans and their respective membership are:

International Registration Plan (IRP)

Alabama	Kansas	North Dakota
*Alberta	Kentucky	Oklahoma
Arizona	Louisiana	Oregon
Arkansas	Michigan	Pennsylvania
Colorado	Minnesota	South Dakota
California	Mississippi	Tennessee
Connecticut	Missouri	Texas
Idaho	Montana	Utah
Illinois	Nebraska	Virginia
Iowa	North Carolina	Wisconsin
		Wyoming

NOTE: The States of South Carolina and West Virginia have been approved for entry into IRP, effective the 1986 licence year.

**Alberta is the only Canadian jurisdiction that holds membership in IRP*

Uniform Vehicle Registration Proration and Reciprocity Agreement (Western Compact)

*Alaska	Iowa	*New Mexico
Alberta	Kansas	North Dakota
Arizona	Minnesota	Oregon
*British Columbia	Missouri	South Dakota
Colorado	Montana	Utah
Idaho	Nebraska	*Washington
Illinois	*Nevada	Wyoming

** Members of Western Compact only*

Canadian Agreement on Vehicle Registration (CAVR)

Alberta	Ontario	Nova Scotia
British Columbia	Quebec	Newfoundland
Saskatchewan	New Brunswick	Prince Edward Island
Manitoba		

Details of permits and certificates issued and revenues received on behalf of the Board are shown below.

COMMERCIAL LICENCING RECIPROCITY 1985/86 (IRP, WESTERN COMPACT AND CAVR)

	NO.	REVENUE
Vehicles prorated	43 209	$2 389 399*
Cab cards issued	15 111	102 230
Backing plates	1 987	5 961

**Prorationed licence fees from non-resident carriers only*

Prorationed licence fees from Alberta residents for the 1985/86 fiscal year, paid directly to the Motor Vehicles Division of Alberta Solicitor General, totalled $4 257 122 which covered 13 277 prorated vehicles, and are not included in the above figures.

OPERATING AUTHORITY CERTIFICATES 1985/86

Intra-Provincial (Truck)	
New Applications	2 936
Amendments	222
Transfers	12
Cancellations	229
Reinstatements	3
Renewals	4 384
Dormant Certificates	4 343
Revocations	94
Extra-Provincial (Truck)	
Certificates Issued	1 636
Certificates Renewed	327
Certificates Cancelled	49
Private Carriage Identification Cards	
New Applications	10
Cancellations	5
Renewals	316

In accordance with the Directive from the Council of Ministers Responsible for Transportation and Highway Safety, the Canadian Conference of Motor Transport Administrators (CCMTA) continued its work towards an administrative simplification of the methods used to collect all truck-related taxes. The program being developed is patterned after the Canadian Agreement on Vehicle Registration (CAVR). In response to this Directive, the Standing Committee on Drivers and Vehicles are developing two systems: The Uniform Distance Reporting System and The Single Cab Card Procedure System.

Certificate Review

The process of converting extra-provincial operating authorities to Commodities Index terminology neared completion during the past year. A total of 78 authorities were reviewed of which 56 included examinations for dormancy, pursuant to Section 25 of the Motor Transport Act.

Considerable attention was directed to the task of preparing for the implementation of the Standard Transportation Commodity Code. This new code, known as the STCC, was intended to replace Alberta's Commodities Index which has been in use in Alberta for the past eight years. The Index provides the Alberta Motor Transport Board with a systematic method of classifying, describing and defining commodities appearing on extra-provincial operating authorities.

Communications, Research and Training

This section of the Motor Transport Branch is charged with the responsibility of providing support services to the Board and Branch in the areas of communication, research and training.

Communications

During the fiscal year 1985/86, efforts continued to establish an effective communications network with various audiences within the transport industry, public interest groups, government departments and agencies and between Board and Branch. Personnel are available for speaking engagements and transportation-related seminars. Displays are available for trade shows and fairs and topical brochures, pamphlets and posters are distributed from vehicle inspection stations and district offices.

Regulatory changes are co-ordinated by this section and distributed to some 125 user groups through the Board.

Research

The Research Section undertakes major and long-term projects on behalf of the Board and Branch which evaluate existing policies, regulations and procedures and determine consequences of proposed changes to various user groups. The section contributes details of the "Alberta picture" to various national and international transportation-related agencies; a case in point being a monthly statistical report on applications for authority sent to the Canadian Conference of Motor Transport Administrators (CCMTA).

During the fiscal year 1985/86, research personnel were deeply involved in developing an operating authority subsystem in connection with the Solicitor General/Motor Transport Branch Automation Project (developing a common computer data base and communication network with the Motor Vehicle Division).

Training

The Training Section provides orientation and review programs and updates education packages, primarily for Board/Branch employees; however, it will respond to invitations from industry and public interest groups for seminar materials of topical interest and displays at trade shows and fairs.

During 1985/86, this section provided an orientation seminar package for one new part time Board member, worked to develop a series of topical training packages that are geared to both Board/Branch employees and specific segments of the transport industry, and prepared and delivered staff training packages on "Introduction to the Computer" and "Transportation of Dangerous Goods."

TRANSPORTATION SAFETY BRANCH

R.R. Hogg
Director

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The *Transportation Safety Branch*, the provincial government's traffic safety co-ordinating agency, is responsible for reducing the number of motor vehicle collisions, injuries and deaths in Alberta.

Through research, legislation, investigation, inspection and educational activities, the branch develops and implements progams aimed at the three primary elements of a collision — the driver, the vehicle and the roadway— in order to reduce collision rates and improve safety on Alberta's highway system.

Over the past year, total collision and fatality rates increased. However, measured in terms of vehicle-kilometres travelled (a more accurate indication of traffic activity than population numbers), Alberta had the third lowest fatality rate in Canada.

During the 1985/86 reporting period, the branch ran two province wide safe driving campaigns whose key strategy was to positively reinforce the motorists' personal responsibility for their driving behaviours. "How Roadwise Are You?" ran during the summer months and "Snowhow ... Take What You Know on the Road" ran during the winter. The two campaigns, which used a promotional format focussing on audience participation, were very well received by Albertans. In addition, the branch also ran a school bus safety television commercial during January and February, 1986. This commercial also drew many favourable comments.

The branch maintains liaison and undertakes joint projects with other professional international and national traffic safety organizations such as the American Association of Motor Vehicle Administrators, Roads and Transportation Association of Canada, Canadian Conference of Motor Transport Administrators, Canada Safety Council, the Traffic Injury Research Foundation and the Commercial Vehicle Safety Alliance.

The branch contributes expertise to other provincial government departments, agencies, and boards such as the Impaired Driving Countermeasures Coordinating Committee, the Alberta Research Council, Alberta Solicitor General, the Alberta Alcoholism and Drug Abuse Commission, the Department of Education and the Faculty of Extension, University of Alberta.

Engineering

The Engineering Section's major area of responsibility is the roadway and vehicle aspect of transportation safety.

The detailed investigation and analysis of motor vehicle collisions is an essential engineering function with major emphasis on roadway and vehicle aspects of collisions but also the interrelationship with the driver. Identification and treatment of roadway locations where collisions are occurring or likely to occur continues to enable enhancement of road safety. Over 600 such locations were identified, inspected and analysed with resultant changes. Input into the department's construction program was provided where analysis indicated major revisions were needed to improve road safety.

Detailed study and analysis is also done at all fatal collision locations and construction zone collisions on the primary highway and secondary road systems. A total of 257 fatal crashes were studied and 269 construction zone collisions reviewed. This enables ongoing spot improvement as well as determination of methods for prevention of similar types of collisions.

The review of individual collision reports resulted in action in 127 cases to correct specific hazardous road conditions, and included assistance to rural municipal jurisdictions where secondary roads were involved.

Specific collision investigations were carried out on 335 school bus crashes. A comprehensive analysis of school bus safety is generated and assistance provided to local school bus authorities in utilizing this to enhance school bus safety. This information was also used as input to the general school bus safety programs of the branch. Fifty-eight other crashes were studied indepth including site examination, vehicle examination and interviews with survivors. A summary of seat belt use benefits, vehicle conditions, driver and roadway factors was developed.

Significant traffic engineering functions were also undertaken in the section. One hundred and ten studies were undertaken to examine traffic operation and safety characteristics at locations throughout the province and 14 reports were prepared detailing analysis and recommendations for improvements and changes.

Full traffic signals were installed at five intersections and pedestrian signals at seven crosswalks to improve traffic and pedestrian flow while regular maintenance was also done at 73 sets of signals.

The ongoing review of highway speeds was based on data from 350 speed study locations and a report prepared. Special speed data was obtained at 50 locations to enable analysis and establishment of the proper speed limits.

Railway crossing safety continued to be an area of high priority. Inspections were done at 350 main line at grade crossings in a special program to identify safety improvements. The regular crossing activities resulted in 68 inspections in conjunction with the railway companies and Canadian Transport Commission with 22 new automatic signal applications. Sight line clearance was undertaken at 22 sites. Guide manuals were also prepared to provide assistance to regional and district staff when collecting crossing data.

Traffic engineering review of 80 highway designs was undertaken to assess the operation and safety potential of these proposed designs.

Vehicle safety, standards and inspections are also the responsibility of the Engineering Section. Major emphasis was placed on the inspection of school buses, motor crashes and commercial trucks, tractors and trailers and was accomplished with assistance from regional staff. Two thousand four hundred and thirty-two school buses were monitored and 215 motor coaches were inspected. More than 10 400 commercial truck units were inspected in addition to over 1100 trucks carrying dangerous goods. Vehicles involved in collisions were also examined in detail in 240 cases. The distribution of information regarding vehicle safety systems was accommodated through 74 seminars, visits to 1476 bus inspection stations and individual queries through the office. Extensive monitoring for compliance with national standards was carried out at the manufacturing level for recreational vehicles.

A new program was developed to ensure that vehicles written off due to collision damage were safety inspected after repairs. This included development of inspection standards, forms and procedures.

With the support of the industry, logging trucks were inspected in a number of locations in the province during the hauling season while other trucks were subject to inspections in conjunction with Motor Transport Branch at eight commodity systems inspections.

Staff of the section continued to provide traffic engineering and vehicle related advice to many parts of the department and the transportation industry. Information gained from collision investigations, vehicle examinations and regular traffic analysis was regularly presented at school bus industry seminars, logging industry meetings and to other transportation officials. Regular evaluations of specialized truck configurations, bus and other vehicle standards have been presented to the Motor Transport Board. Technical staff of the section were heavily involved in the development of traffic signs and signal installations as well as transportation safety materials.

Operator Improvement

The Operator Improvement Section's primary objective is to reduce the number of traffic related mishaps through its public education program and also provide a number of administrative functions within the branch.

During the 1985/86 fiscal year, safety education

representatives made 2487 presentations in Alberta schools involving 179 046 students.

To supplement this activity 373 traffic safety presentations were given to non-school groups such as members of industry, service groups and associations which resulted in a large number of Albertans receiving safety related information.

While much of the section's public education program involves providing lectures, representatives from Regional Transportation are also available to man displays in schools, industrial settings, malls and fairs. The majority of the Transportation Safety Branch's literature that is made available to the public is provided by the Operator Improvement Section.

This section provided training for delivery of the air brake (Q) endorsement program increasing the number of qualified course managers to 45.

The School Bus Driver Licence Endorsement Program started January 1, 1986 and the training of 98 school bus administration leaders necessary to deliver this program was conducted by this section. Upon successful graduation school bus drivers can have an "S" endorsement placed on their operator's licence by the Motor Vehicles Division, Solicitor General. It is expected that the majority of school bus drivers will complete this program in the next two years.

In the Edmonton area, driver counsellors sent 1838 letters to drivers who were over-involved in collisions in the previous year which resulted in 284 personal interviews and 322 telephone contacts. Driver training school instructors, government employees and commercial drivers who had developed poor driving records were also interviewed. Interviews with these drivers have proved to be of assistance to them and have enabled the branch to acquire more information about collision causes and remedies. Counsellors were also involved in providing presentations which outlined their program and explained their findings to industrial groups.

The Operator Improvement Section is responsible for testing driving instructors as well as licensing and monitoring instructors and driving schools. A total of 727 driving instructors and 107 driver training schools were licensed by the branch during 1985/86. Safety education representatives conducted 291 monitorings of the driver training industry.

In conjunction with its involvement in driving schools, the section administers the Driver Education Incentive Program. During 1985, 20 052 new drivers received certificates entitling them to an insurance reduction.

Because of the Transportation Safety Branch's close relationship with both the driver training and student transportation industries, special seminars were given for each. In the 1985/86 fiscal year 109 school bus supervisors, 46 driver training school operators and 63 driver training instructors attended seminars specifically designed to meet their professional needs.

Planning & Program Support

Planning and Program Support is responsible for co-ordinating comprehensive, planned approach to improving traffic safety in Alberta.

Part of this integrated approach involves the immediate collection, continual monitoring and indepth analysis of the causal factors of traffic collisions by the Crash Analysis Unit, which maintains the province's traffic data system. There were approximately 98 000 reported traffic collisions during 1985/86, an eight per cent increase from 1984/85. Approximately 8000 of these collisions occurred on primary highways. Countermeasure programs and recommendations for improvements to the primary highway system, are based on the unit's thorough analysis of these crashes for road hazards and collision prone locations.

In addition to providing an in-house consulting and program support service on all aspects of branch traffic safety programs and countermeasures, the Research and Analysis Unit, conducts high priority traffic safety research projects.

1985/86 research projects included:

- studying the traffic safety implications of a nighttime curfew
- profiling alcohol involved collisions
- reviewing the impact of child restraint legislation in other jurisdictions
- a provincial comparison of school bus fatalities
- examining the injury severity of motorcycle helmet users.

The unit also prepared a number of background informational support packages for other government departments, agencies and committees.

The Research and Analysis Unit answered over 200 statistical/information requests on a wide range of traffic safety topics from the public, the media, special interest groups and other government departments. These requests averaged 2.5 manhours to complete and used approximately $50 of computer resources.

For the fiscal year ending, March 31, 1986, the Field Services Unit conducted 962 speed studies. Of these studies, 630 were monitoring studies which were done at the request of Engineering Services. Specific locations on primary highways and secondary roads were monitored on an annual basis to evaluate existing speed limits. Three hundred and thirty-two were special studies done at the request of either Engineering Services or municipalities to assess speed limits in urban areas.

The unit also conducted vehicle and pedestrian movement studies at 275 locations throughout the province. Frequently, particular manoeuvers such as queue lengths were studied to develop a more comprehensive profile of the intersection concerned.

Fifteen locations were filmed or video taped to better illustrate safety concerns at specific

locations and 32 railroad crossings were surveyed for possible increased protection. Photographs were taken at the crossings to view signing and site distances. To complete a truck acceleration program, eight sites were surveyed to assist the Highway Safety Technologists.

The Administrative Services Unit co-ordinated the administrative, financial and personnel responsibilities of the branch during 1985/86.

PUBLIC COMMUNICATIONS BRANCH

S. Holcomb
Director

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The *Public Communications Branch* is responsible for providing public relations counsel and a complete communications service to the various divisions in the department. The branch also communicates and promotes the achievements and programs of Alberta Transportation to a variety of external audiences.

The branch plans, develops and implements public information and advertising campaigns sustaining departmental policies, programs and services. It is also the co-ordinating centre for department publications, news releases, audiovisual and display needs.

Public Communications Branch

During the 1985/86 fiscal period, Public Communications activities comprised the planning of a new winter/summer traffic safety awareness campaign, which again involved a major school bus safety component; in further promotion of the legislation on children being secured in safety seats while travelling in vehicles, a Child Car Safety Seat poster was developed and distributed; provincial airports were profiled through various airport terminal building opening; and the Blackfalds Interchange opening was co-ordinated. In addition the branch issued more than 400 regular news releases to the media outlining construction programs and tender awards. On the Road Again, the department's internal newsletter, was produced by the branch on a bi-monthly basis throughout the fiscal year.

Various departmental displays were further developed with supporting audiovisual and promotional material, including computer safety games and "Freeway" the department mascot and his decals and the new buttons, continued to travel throughout the province. Major themes included road construction, traffic safety and specific branch messages.

The Public Communications Branch took an active role in the co-ordination of National Transportation Week and the "It's Our Year" program in Edmonton and throughout the province; and, in conferences, conventions and other world class exhibits with government and nongovernment groups. The branch also provided assistance with internal communication matters and worked with individual staff in preparing supportive communications programs.